

Silicon Times Report

The Original Independent OnLine Magazine"
(Since 1987)

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The Publisher, Staff &
Editors

Florida Lotto - LottoMan v1.35

Results: 10/26/96: 6 of 6 numbers, 3 three number matches

From the Editor's Desk...

November First! Imagine that. its almost election time. This time around its darn near as important to pay close attention to the local elections as it is to wonder at the National Scene. There has been a controversy brewing in the State of Florida about its Sugar Growers and the Everglades. Its really going to come to a head at Election time. The matter is on the ballot in then form of three amendments. #s 4,5,and 6. These "things" could very well prove to be a disaster to the entire nation over the next decade. You see, these three proposals allow the for the taxation of food sales. Incredibly, as I dug further and further into this mess the more disgusted I became. It seems or, at least appears the local reps for the "Citizens To Save Jobs & Stop Unfair Taxes Campaign" who are against the passage of the amendments are more interested in promoting the notoriety of a local politician (Mr. Tony Hill) than they are in informing the voting public of the specific dangers of the proposed amendments 4, 5, and 6.

To make a long story short. I called the local offices of "Citizens To Save Jobs & Stop Unfair Taxes Campaign", explained my desire to know more about the issues and my intentions to rebut an endorsement our local Channel 4 TV had given the proposed amendments and was referred to an office in Orlando, FL.. Here I spoke to the head of the effort or, at least that is what I was told he was, and informed the gentleman of my intentions. Just between you and I, I do not think he took me serious. But at least he listed the local "head" simply brushed me off. To further shorten the story, I called them back as I was about to leave to go tape the Rebuttal.

Between the time I had left my office and arrived at the TV Studio, they had called there and insisted they do the rebuttal. They actually wanted me to yield my time. Talk about gall.. Most folks who've ever attended one of my seminars know I have no problem talking to any size group or, for that matter, in front of cameras. Yet these political pros.. <snicker> felt that the rebuttal would not deliver "their" message. I wasn't there to deliver "their" message. I was there to deliver my message as a civic minded citizen, taxpayer and voter.

You can bet on one thing though. Mr. Hill (D Jax) was as surprised as I was over this maneuvering by the head of the local office of "Citizens To Save Jobs & Stop Unfair Taxes Campaign" I called Mr. Hill and had a talk with him. Then I read my rebuttal to him and he expressed a desire to have a copy faxed to his office so that he might use it in his various radio spots. Hopefully, we'll see Mr. Hill's rebuttal on channel four Monday evening.. the night before the election.

Ralph...

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Of Special Note:

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STReport is now ready to offer much more in the way of serving the Networks, Online Services and Internet's vast, fast growing site list and userbase. We now have our very own WEB/NewsGroup/FTP Site and although its in its early stages of construction, do stop by and have a look see. Since We've received numerous requests to receive STReport from a wide variety of Internet addressees, we were compelled to put together an Internet distribution/mailing list for those who wished to receive STReport on a regular basis, the file is ZIPPED, then UUENCODED. Unfortunately, we've also received a number of opinions that the UUENCODING was a real pain to deal with. So, as of October 01,1995, you'll be able to download STReport directly from our very own SERVER & WEB Site. While there, be sure to join our STR list.

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STReport Headline News

LATE BREAKING INDUSTRY-WIDE NEWS

Weekly Happenings in the Computer World

Compiled by: Dana P. Jacobson

Program Eats Michigan Police Files

An all-points-bulletin has been issued by Michigan police for the man who sold them a computer program they say now is eating up their case records. Reporting from Manistee, Michigan, The Associated Press says the Crime Tracker program was billed as a way for police to keep track of cases and was sold to around 25 police departments across Michigan.

Manistee County Undersheriff Dale Kowalkowski told the wire service, "It was user friendly, it was simple and did a lot." But, he says, "The program eats itself up after a while." AP say that so far, four years' of data cannot be found on Manistee's computer, and other departments are having problems too. To top it off, the software maker has vanished. "The man used to live in Battle Creek and is believed to be in Australia. Attempts to reach him have failed," AP says.

Manistee authorities have the records on paper, but it would take a full-time employee up to two years to type it back into a computer. The missing information would not stop investigators from solving a crime. It's statistical data used for reports and administration. Said Kowalkowski, "I've got to believe it's at least \$40,000 to \$50,000 in lost data."

Florida Court Online Page Altered

An online court page from Florida has been restored after a digital vandal altered the site to include sexually - oriented images. Reporting from Tallahassee, the Reuter News Service says the page was taken offline for two days after the intruder cracked the page and added pictures of nude men and women in various sexual activity. "The photos caused a stir among those who use the court page to access Florida Supreme Court and Appellate Court

decisions," Reuters commented. "The home page is normally a little more staid, with a plain wood-grained background and hypertext links. Prurient, but disappointed, surfers looking for thrills on the net gave the court system home page one of its busiest days ever on Friday, having heard about the incident or read about it in a local newspaper."

Craig Waters, executive assistant to Florida Supreme Court Chief Justice Gerald Kogan, told the wire service, "We've had a significant number of hits today on our home page. With all the publicity surrounding this, a lot of people are curious." Waters said no files were tampered with and court records remained intact. The Florida Department of Law Enforcement was contacted and was investigating the break in. The Associated Press adds state police "were making copies of the offending pages as they try to track down the hacker, who faces charges punishable by up to five years in prison." Waters told AP the site contained more than 500 pages of text, and so far officials have found only three that were embellished.

Compaq Holds Computer Sales Lead

Compaq Computer Corp. continues to lead the computer industry in retail sales, with latest figures showing its third-quarter revenue growing 16.3 percent over the same period last year. Numbers from Dataquest Inc. report Compaq's worldwide shipments totaled 17.2 million during the quarter compared with 14.8 million a year ago. Its market share is 10.3 percent, up from 10 percent last year.

However, notes business writer Catalina Ortiz of The Associated Press, all eyes are on Toshiba Corp., whose skyrocketing sales of notebook computers have lifted the company to the No. 5 spot among the world's PC makers during the third quarter. Dataquest reports Toshiba's shipments nearly doubled during the July-September quarter compared with the same period a year ago. "Even so," says Ortiz, "Toshiba's jump from the No. 8 spot a year ago was extraordinary because notebooks make up less than 20 percent of the overall personal computer market."

In fact, Bill Schaub, Dataquest's director of worldwide tracking, acknowledged, "It surprised all of us, even those who watch it every day," noting Toshiba's market share is now 4.4 percent. Schaub said that -- along with PC manufacturers offering lower-priced machines than last year -- means the industry is well on pace to grow a predicted 19.7 percent for the year, adding, "We're expecting a really healthy fourth quarter. (Earlier) we were a little pessimistic about the home market in the U.S., but some manufacturers have made significant changes with lower prices."

Between Compaq and Toshiba on the list of top sellers are IBM with an 8.6 percent market share, Apple with 5.4 percent, NEC with 4.5 percent. Dataquest notes Apple's market share was down sharply from 8.7 percent as it saw shipments tumble nearly 28 percent from a year ago. Meanwhile, Hewlett-Packard, No. 5 in the second quarter, didn't make the list this time. Schaub said the company may be slowing sales of low-end machines to protect its profits.

Apple Cuts MessagePad Price

The price of Apple Computer Inc.'s MessagePad 130 has been cut from a suggested retail price of \$799 to a suggested retail price of \$699. Reporting from Apple's Cupertino, California, headquarters, the Reuter News Service quotes Apple as saying it is offering Win2Go Office Companion for Newton software free with its MessagePad 130 handheld computer between now and Jan. 31, 1997. "Purchasers in the United States and Canada will be

entitled to one free copy of Win2Go software from PICA Information and Management GmbH, having an estimated retail value of \$180 to \$190," Reuters says.

Apple Offers New Laptop for Kids

A modified version of Apple Computer Inc.'s handheld Newton organizer is being turned into an inexpensive portable computer for students, part of the firm's bid to remain at the head of the pack in the computer industry's education market. The Apple eMate 300 is an \$800 machine that "looks like a grown-up's laptop with a keyboard and a flip-up screen, but in a rugged casing that can survive rough handling," writes Kourosh Karimkhany of the Reuter News Service.

Reporting from Apple's Cupertino, California, headquarters, the wire service says Apple plans to sell the machine directly to elementary and high schools, beginning early next year, as an alternative to personal computers. For the price of a \$2,500 multimedia PC, a school can buy three eMates, says Jim Groff, general manager of Apple's information appliances group, adding, "The federal government says we need to get to a three-to-one student-to-computer ratio by the year 2000. I would say the eMate is the only credible vehicle for accomplishing that."

And, says analyst Mike McGuire of Dataquest Inc., the product could keep educators from abandoning Apple as the leading supplier of computers for classrooms. "The potential for something like this in a classroom setting is tremendous," he said. "This will be an indication to educators that Apple is one of the few companies spending time extending computing to more and more kids."

Apple Plans New Operating System

A new line of Apple Computer Inc. computers is planned as early as 1998 that will run an operating system written from scratch, says Apple CEO Gilbert Amelio. Speaking to investors at the American Electronics Association conference in Monterey, Calif., Amelio said the new operating system will leapfrog Microsoft Corp.'s competing family of Windows software, adding, "When you are the minority player in the marketplace, as we are, you need something other than market share to distinguish yourself." Reporting for the Reuter News Service, writer Kourosh Karimkhany says Amelio declined to specify what the new software will look like or how it will outperform Windows, but promised it will "completely change the way" people get their work done on computers through applications, such as word processing and spreadsheets.

Reuters notes that earlier this year, Apple said it will abandon the overhaul of its Macintosh operating system, an effort code-named "Copland." Amelio says Apple programmers will use some of the components of Copland but will practically start from scratch. He also told investors that increasing the struggling computer maker's revenue and market share will not be a priority until he could improve the company's operations and product lines, an effort that may take until 1998. Said Amelio, "I have to have a solid foundation before I can build a castle." Without a solid foundation, he said, Apple would improve its financial performance for one or two quarters but slide again.

DVD Copyright Technology Set

Movie producers, computer makers and consumer-electronics manufacturers have reached agreement on the technical specifications for preventing

unauthorized copying on digital video disk (DVD) players and drives. The Copyright Protection Technical Working Group says controls will be achieved through a scrambling scheme based on encrypting the content on the discs, and licensing the technology for decryption. The organization and its members intend to ask Congress to adopt legislation prohibiting the circumvention of copy control technology. "We are pleased that a means has been found to allow motion pictures on DVD to be protected by encryption," says IBM's Alan Bell, who is co-chair for the CPTWG's DVD subcommittee. "Most importantly, it is an effective method that will not undermine consumers' enjoyment of the product."

"Equipment manufacturers who wish to have their machines play encrypted DVD-video will be in a position to get a license to do so," adds co-chair Chris Cookson of Warner Bros. "They will then also be obliged to have their machines respond to the licensed copy control measures." The copy-protection system approved by the CPTWG uses a data scrambling technique initially proposed by the DVD Consortium, an entity established to disseminate the basic DVD technology. Representatives of Intel and other computer companies recommended that the computing power for descrambling be reduced. The DVD Consortium worked with members of the computer industry to implement a modification proposed by IBM that reduced the demand on computational power substantially, without compromising its copy protection value.

NC-PC Wars Heating Up

It's heating up in that contest that pits new stripped-down "network computers," bred exclusively for the Internet, against traditional personal computers. As reported earlier, Microsoft Corp. and Sun Microsystems Inc. are facing off with rival plans for simplified versions of the powerful personal computers used on most office desks. "The new computers are cheaper," notes business writer David E. Kalish of The Associated Press, "for businesses to buy and maintain than \$2,000-to-\$3,000 personal computers because they would download software via the Internet -- instead of storing applications in a hard-drive that needs to be periodically updated with new software."

Beyond that, the significance of the NC-PC battling is the lining up of key players against Microsoft as they try to chip away at the Redmond, Wash. company's dominance in computer operating software. In the opening salvo, Oracle Corp. and Netscape have formed an alliance, endorsing each other's flagship products. The deal calls for Oracle to include the Netscape Navigator browser with its own operating system software. Netscape, in turn, will sell Oracle's data bases with its server products. And the president of Sun Micro's computer division is accusing Microsoft of playing copycat. As noted, Microsoft Chairman Bill Gates previously has derided the idea that anyone would want a stripped-down box - dependent on a network rather than a full-fledged PC, most of which use Microsoft's operating software.

Said Ed Zander, president of Sun Microsystems Computer Co., "Microsoft, to me, is putting a Band-Aid on the past. Desktop computing is the paradigm of the '80s. What they're doing reinforces what we are doing tomorrow as right." Meanwhile, Kalish sees skepticism in the business world over the new computers, because the NCs are seen as harkening back to an earlier age when networks of bare-bones computers with few customized functions were hooked to a central mainframe that did all the processing.

Editor Don Willmott at PC magazine, which advocates the traditional PC desktop, told the wire service, "There's a certain 'Back to the Future'

smell to all of this. It's reminiscent of mainframes and dumb terminals going back to the '60s." AP says Sun's JavaStation system is to start at less than \$1,000 for each terminal, and cost less than one quarter what it costs annually to keep up a personal computer. Such maintenance can cost up to thousands of dollars per year per machine.

And, as expected, Microsoft, in conjunction with Intel Corp., says it is working with numerous computer hardware and software manufacturers to develop what it called the NetPC. The computer makers include Compaq Computer Corp., Dell Computer Corp., Digital Equipment Corp., and Hewlett Packard. "The Sun terminals are more dependent on a computer network than the Microsoft-Intel machines, which would contain hard drives and storage capability," Kalish says. "Sun's Zander said the new computer networks were not for everyone; new Sun customers so far include companies with large numbers of employees who perform simple functions such as data entry." Sun said it would begin shipping the JavaStation products late this year.

Reno Wants More Computer Access

The world's police chiefs are being urged by U.S. Attorney General Janet Reno to join an effort to gain greater access to the secrets stored on the computers of suspected criminals. Speaking to a Phoenix meeting of the International Association of Chiefs of Police, Reno said law enforcement officers are helpless if they are not allowed to decode the data in criminals' computers, which critics say is a violation of individual rights. According to United Press International, Reno told the 3,500 delegates, "Few of you realize just how easy, just how cheap it is (to code information) and just how helpless all of us in law enforcement are if we can't decode the data."

She dismissed critics' claims that the push violates individual rights, saying that being able to obtain the information is key to waging a successful battle against crime in the future. "Our ability to protect public safety," she said, "is threatened. Terrorists will be able to communicate securely and the value of wiretaps will be lost." As reported, the Clinton administration has been locked in a fight with those who say that their efforts in this touchy corner of cyberspace is a violation of privacy, with critics contending such attempts also amount to granting the federal government additional powers.

Reno contends, though, that current efforts carry all the safeguards that go along with requests for search warrants and other investigative methods, adding, "It is important to understand that if we fail in this effort law enforcement agents at every level of government will find their job increasingly more difficult. We have a long way to go but we must go together." The chiefs also were urged to work with the federal government on a range of computer-related criminal activity. Said Reno, "If a man can sit in a kitchen in St. Petersburg, Russia, and with his computer steal from a bank in Chicago, he can steal from your bank too."

Net Use Threatens Phone System

Millions of PC users tapping into the Internet threatens to collapse the U.S. telephone system. With Internet use rising at 42 percent a year, phone capacity simply cannot keep pace, warn industry experts. "It is like gridlock on a highway: If you are close to capacity, traffic still moves slowly, but just add a few more vehicles and you get gridlock," Amir Atai, director of network and traffic performance at BellCore, tells the Reuter News Service. "This type of (Internet) usage on our network is growing at 10 percent a month and we are watching it closely," adds NYNEX Corp.

spokeswoman Susan Butta.

For phone networks, notes Reuters, gridlock means fewer calls going through on the first try, more busy signals and even blocked calls, where perplexed callers hear nothing at all after dialing. The bottleneck is essentially confined to local networks, and does not affect long-distance carriers.

According to Reuters, industry studies suggest that if U.S. Internet penetration reaches 15 percent, it would force a \$22 billion network investment by the regional Bells. California currently has the highest penetration at eight percent. Action will be required within two years, when the 15 percent figure is expected to be reached, according to Atai.

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- '• No Indenting on any paragraphs!!
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- '• Please use a single font only in an article. TTF CG Times 12pt. is preferred. (VERY Strong Hint)

If there are any questions please use either E-Mail or call. On another note. the ASCII version of STReport is fast approaching the "end of the line" As the major Online Services move away from ASCII.. So shall STReport. All in the name of progress and improved readability. The amount of reader mail expressing a preference for our Adobe PDF enhanced issue is running approximately 15 to 1 over the ASCII edition. Besides, STReport will not be caught in the old, worn out "downward compatibility dodge" we must move forward. However, if the ASCII readership remains as high, rest assured. ASCII will stay. Right now, since STReport is offered on a number of closed major corporate networks as "required" Monday Morning reading.. Our ascii readers have nothing to worry themselves about.

Many grateful thanks in advance for your enthusiastic co-operation and input.

Ralph F. Mariano, Editor
STReport International Online Magazine

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FCC APPEALS TO SUPREME COURT ON TELECOM FREEZE

The Federal Communications Commission has asked the Supreme Court to lift a freeze imposed last week on the agency's local phone competition rules, saying it "draws into question not just the timing of competition in the local market, but also the timing of full entry by the (regional Baby Bell phone companies) into the long- distance telephone market." State regulators, who oppose FCC's handling of the new telecommunications rules, have said that by taking the matter to the Supreme Court, the FCC itself is

delaying competition. State regulators and local phone companies have argued that the new rules usurp states' authority and are unfair to local phone companies. (Investor's Business Daily 25 Oct 96 A30)

MICROSOFT LAUNCHES ATTACK ON NCs

Microsoft and allies Intel, Hewlett-Packard, Compaq, Dell and other computer makers are proposing their alternative to the widely touted network computer. Microsoft's device, which is not yet named, will be a simpler, less-expensive PC that uses a modified Windows operating system to access applications programs and data stored on servers, much like the NC. The strategy is to drive the price of a PC below the \$1,000 mark, providing stiff competition to backers of the NC concept. "The PC folks have so much invested that they are going to do a lot to stave off any change that will upset the applecart," says a Forrester Research analyst. "The idea is to make the NC stillborn so it doesn't even get out." Microsoft Chairman Bill Gates has said that the alliance will deliver the new machines in 1997. "With the drop in component prices, it's becoming possible for a real PC to cost what the promised NCs will," says one PC maker. (Wall Street Journal 25 Oct 96 A3)

ORACLE'S RESPONSE

Oracle CEO Larry Ellison isn't worried by Microsoft's new plans. He's hoping that Microsoft's ongoing browser wars with Netscape will distract Microsoft's Bill Gates long enough to give Ellison a chance to pull the rug out from under him: "Then, if we can sneak underneath Microsoft with appliances that are much cheaper and easier to use than PCs, rather than Windows everywhere, it could be Windows nowhere." Ellison is infamous in the industry for his combative approach to competition -- and everything else: "I have never seen a company that has so much in-fighting," says a technology strategist with C2 Ventures. "It's phenomenal. At Oracle they don't hold hands and sing 'Kumbaya.' They'll be holding one hand and have a dagger in the other." (Fortune 28 Oct 96 p119)

FEDERAL NETWORKING COUNCIL LOOKS AT ENCRYPTION ISSUES

The White House has asked the Federal Networking Council Advisory Committee to come up with recommendations on information security issues, including the administration's latest proposal for an encryption "key recovery" plan. A recent memo published by the Internet Architecture Board and the Internet Engineering Steering Group protested the key recovery plan, saying that any type of escrow system would "inevitably weaken the security of the overall cryptographic system, by creating new points of vulnerability that can and will be attacked... Sound cryptographic practice dictates that users never reveal their private keys to anyone, even a certification authority." The memo also recommended against any restrictions on key size. The advisory committee is working to draft a policy statement on encryption, which will address many of the conflicting issues surrounding the controversial topic, including the offensive and defensive uses of cryptography, and the impact of rapid technological advances. (BNA Daily Report for Executives 23 Oct 96 A23)

WIRED OFFERING GROWS COLD ON PLATE IS RETURNED TO KITCHEN

Operating on the assumption that when you're hot, you're hot, and when you're not, you're not, Wall Street's estimation of Wired Ventures' value has cooled considerably. Wired Ventures, which owns Wired magazine, the HotWired Web site, and the HotBot search engine, has had to withdraw an Initial Public Offering for the second time this year: first in July (when it withdrew an IPO claiming the company was worth \$450 million) and now in October (withdrawing an IPO valuing the company at \$272 million). The company lost \$31.3 million in the second quarter of this year, mainly due to

costs of developing HotWired. Stock market analyst Ark Stahlman of New Media Associates says there are "doubts about whether anyone likes this magazine anymore, which coupled with its inability to make money, registers in the investment community." (On the other hand, the print magazine is the one unit of the company that generates real revenue.) Wall Street analysts think that Wired's next move will be to offer the company to private investors -- at a still lower price. (New York Times 26 Oct 96 p22)

ACADEMIC SYSTEMS HITS A HOMER WITH MEDIATED LEARNING

Feedback from some 40 campuses now using Academic Systems' three mediated-learning algebra courses indicates the software company's approach to instructional technology is a winner -- with company officials saying their research shows higher passing rates for students using the computer-based course than those using the traditional lecture approach. In addition, students who have taken the mediated-learning courses have done better in subsequent math courses. The courseware works best with the full involvement of a teacher present, says a Cal Poly professor. One experimental course that used the software only resulted in lower student grades and many dropouts. "It's an exquisitely fine tool to allow the instructor to intervene just at the right time and just at the right place," says Cal State-Hayward's provost and VP for academic affairs. "It's the best example of what instructional technology is supposed to do, which is to make the instructor a better instructor." In addition to the algebra courses, Academic Systems is now developing a mediated-learning writing course. (Chronicle of Higher Education 25 Oct 96 A27)

NSF CALLS FOR BETTER INTERNET SEARCH MECHANISMS

Juris Hartmanis, assistant director of the National Science Foundation's Computer and Information Science and Engineering directorate, says the key to making the Internet useful for research is more sophisticated search mechanisms that could weed out some of the superfluous material identified using typical word-based searches. Hartmanis suggests that incorporating a way to record the number of "hits" associated with a document or Web site and allowing users to customize their own search engines could greatly improve the value of the Internet. (BNA Daily Report for Executives 24 Oct 96 A31)

CD-ROM SHAKEOUT PREDICTED

Tom Turpin, CEO of Virgin Sound & Vision, is predicting a "market correction" in the CD-ROM publishing business because production costs have gotten so high that each effort must be a "home run." "What has happened in this business is it's pushed up to the point now that everybody's doing \$800,000 productions, and all of a sudden you're swinging for the fences, and you can't successfully manage your business because nobody can manufacture every single title as a home run. That's going to create a massive shakeout in this business, and a massive restructuring of how much people are going to pay. And you're absolutely going to see it happen over the next 12 months." (Digital Kids Oct 96 p12)

E-MAIL WILL REMAIN PRIMARY "KILLER APP"

Using figures developed by Morgan Stanley comparing e-mail and Web user patterns, Stern magazine in Germany reports that e-mail will continue to be the dominant activity on the Internet into the next century. The article predicts the number of e-mail users will increase to 200 million by the year 2000, compared with 152 million Web users. The Stern article also features John Gehl and Suzanne Douglas, who write Innovation <
<http://www.newsscan.com>> as well as Edupage. (Stern 17 Oct 96 p124)

Sun Microsystems will begin marketing a "network computer" (NC) called the JavaStation, priced at \$742 for a basic model and \$995 with keyboard, mouse, and color monitor; data and software will be stored on server computers and downloaded over the Internet (or an organization's own intranet) as needed. NCs will also be marketed by IBM and Oracle, in a challenge to the PC-oriented network computers (Net PCs) backed by Microsoft, Intel, and (with the exception of IBM) most of the companies with established positions in the PC business, including Compaq, Dell, Digital Equipment, Gateway 2000, Hewlett-Packard, Packard Bell, NEC, and Texas Instruments. Netscape and Apple have agreed to the NC standard. Sun chief executive Scott McNealy says the network computer represents an opportunity "to kill Microsoft -- that's the top priority for all of us." (New York Times 29 Oct 96 C3)

PACTEL UPS CAPACITY VIA WIRELESS DEAL

In an effort to break the telephone line logjam caused by heavy Internet usage, Pacific Telesis Group has signed a three-year agreement with WinStar Communications for wireless links to handle phone and Internet traffic for business customers. Other Bell companies are said to be facing similar shortages as they scramble to keep up with the unprecedented demand caused by Internet use. Phone networks were designed to accommodate a typical three- to five-minute phone call, whereas Internet users often can tie up a single line for hours. (Wall Street Journal 28 Oct 96 B4)

FEW WANT TO PAY FOR ONLINE NEWS

A survey commissioned by the Radio-Television News Directors Foundation shows that although more than half of news consumers polled say they'd be interested in a news-on-demand electronic service, only about 20% would consider paying even a nominal fee to receive it. The survey results indicate that "far more" of those interested would prefer to have such services supported by commercial advertising. The survey audience included three population samples -- a general population group, a group of young adults aged 18-29, and a group of online users. Between 6% and 7% of the population queried receives online news on a regular basis. (Broadcasting & Cable 21 Oct 96 p36)

MCI PONDERES NEW INTERNET PRICING SCHEME

MCI, which currently carries an estimated 90% of all U.S. Internet traffic, is considering replacing its flat- payment schedule with a new pricing scheme based on how much data is transmitted over its lines. The company says flexible pricing will allow it to accommodate what it terms "value-added" services such as real- time videoconferencing , 3-D graphics and Internet voice calling. The company hopes that by charging more for services that take more time, overall efficiency will be improved. "I think that pricing so as to assure that increasing capacity can be paid for is vital," says MCI Senior VP Vint Cerf. "Ultimately, it must be the case that the pricing covers the cost of service -- and in circumstances where usage is not stable but growing, one needs to price according to use. While I am a strong advocate of flat-rate methods to stimulate market development, I think one has to be realistic about relating price to cost." (Electronic Engineering Times 29 Oct 96)

NEWTON REVISITED

Apple Computer is introducing a new computer, the Emate 300, based on Newton rather than Macintosh technology and targeted to the K-12 educational market. The system is about the size of a notebook PC and has a translucent green polyurethane steel-enforced case, a built-in black-and-white monitor, and both a keyboard and a pen device for data input. The machine will sell to schools for \$800 in quantities of one. (New York Times 28 Oct 96 C4) Apple also has new Newtons featuring improved core

technology and speedier processors than earlier versions. Still, some critics think Apple's decision to stick with the Newton same after previous market disappointments is a mistake: "They'd be better off wiping the slate clean. They should call it the Einstein or something," says a Northwestern University professor. (Wall Street Journal 28 Oct 96 B6A)

AOL BANS ALL MAIL FROM 53 "JUNK MAIL" DOMAINS

America Online's new "Preferred Mail" junk e-mail blocking tool was activated several days ago on all 6.5 million accounts; it blocks all e-mail from a list of (currently) 53 network domains that AOL has identified as junk e-mailers. Many of the domains have been used in the past by Stanford Wallace, who is suing AOL for blocking his messages. One blocked domain, managed by an Internet service provider called Cybercom, has been tentatively removed from AOL's prohibited list, after protesting that it had been placed on the list not because of its own actions but because two of its 1500 clients sent adult-oriented junk e-mail, causing AOL immediately to block all mail to AOL subscribers from any Cybercom customer. (Atlanta Journal Constitution 29 Oct 96 D4)

BASKETBALL BATTLES THE NET

The legal skirmish that started when National Basketball Association sued Motorola and Stats Inc. for providing real-time sports updates is heating up as the basketball season approaches. The second U.S. Court of Appeals ruled earlier that Motorola and Stats Inc. were making money off the SportsTrax paging service, using information that is proprietary to the NBA. Motorola and Stats Inc. are appealing that decision, and are allowed in the interim to continue operating SportsTrax. To overturn the second court's decision, lawyers for SportsTrax must prove that it is not crossing "the boundary from mere media coverage of the NBA games" because it doesn't rebroadcast pictures or sounds from the games. The NBA had argued that SportsTrax's frequent updates violated similar agreements it had with television and radio stations, which are allowed to report game updates three times each quarter, plus during half-time and at the end of the game. (Investor's Business Daily 28 Oct 96 A6)

NETWORK FOR ANGELS

The U.S. Small Business Administration is sponsoring an online matchmaking service, connecting so-called angel investors -- private investors who help finance growing companies -- with small businesses seeking a cash influx. The businesses will pay a fee, varying by state, to be listed on the service. "The idea is to create a whole new generation of angels and a whole new generation of businesses," says an SBA official. Initially, businesses will be able to sign up for the Angel Capital Electronic Network, or AceNet, through two nonprofit organizations -- the Capital Network, affiliated with the University of Texas in Austin, and the Technology Capital Network at the Massachusetts Institute of Technology. (Wall Street Journal 28 Oct 96 B2)

E-MAIL USERS EARN MORE

A new study conducted by a professor of economics and business administration at Ursinus College shows that workers who use e-mail earn, on average, 7.4% more than colleagues in similar situations who don't. The data comes from a 1993 U.S. Census Bureau survey of nearly 10,000 workers. The study showed that the discrepancy between wages of e-mail users and non-users was greatest among service workers. Executives who used e-mail out-earned their non-wired peers by almost 10%. (Chronicle of Higher Education 1 Nov 96 A25)

BRITISH TELECOM PLANS PUBLIC KIOSKS PROVIDING NET ACCESS

British Telecommunications (BT) plans to build Europe's largest network of Internet-accessible touchscreen terminals that will allow users to book flights and theater tickets, order products, and display maps and news on screens. The "Touchpoint" terminals will have a coin slot for collecting fees from users, but the main revenues will come from advertising and agent commissions on goods sold through the system. Though the systems will not support e-mail, they will allow a user to navigate the World Wide Web by touching the sensitive screen, similar to an automated teller machine. (Financial Times 29 Oct 96)

E-MAIL ON THE TUBE

Satellite SuperHighways is launching a Hypercast service that will transmit e-mail messages via the airwaves, using the television's vertical blanking interval -- a portion of the TV signal that is now used for closed-captioning. (Investor's Business Daily 28 Oct 96 A6)

DIGITAL SCHMIGITAL

Wired, which has just withdrawn its second attempt to issue an initial public offering, is not the only Digital Age company now being viewed skeptically by Wall Street; the list of corporations whose stock prices are substantially lower than they were earlier in the year include companies engaged in the whole range of Internet-related businesses: Internet search engines and directories, electronic commerce, Internet telephony, Internet service suppliers, Internet information services, and commercial online services. The reason? Richard Shaffer of New York-based research firm Technologic Partners says that investors "have become more realistic about how long it will take for many of the Internet companies to show any profit and more enthusiastic about the continuing growth prospects for established technology companies... It's the Internet plumbing companies that are making money." (New York Times 28 Oct 96 C10)

LOTUS WEBLICATOR SOFTWARE DEVELOPED FOR THE NET

IBM's Lotus Development Corporation will introduce software called Weblicator, designed to offer some of the features of the Lotus Notes "groupware" software for users of Netscape, Explorer, and other tools for browsing the World Wide Web. A user of Weblicator would be able to download information from the Web, revise it offline on a personal computer, and then post the changes to the original common document being worked on simultaneously by a group of colleagues. Weblicator will be sold for \$29 early next year. (New York Times 31 Oct 96 C7)

LOW-COST CABLE MODEM FROM SCIENTIFIC-ATLANTA

Scientific-Atlanta will soon be selling a new cable modem to cable operators (not consumers) for \$199, which is about half the price of competing products. The company says the relatively slow 1.2 megabit-per-second speed will not detract from its usefulness, because most personal computers can't accept data any faster than that. (Atlanta Journal-Constitution 30 Oct 96 F1)

CSI ISSUES SECURITY MANUAL

The Computer Security Institute has published a "Manager's Guide to Cyberspace Attacks and Countermeasures," offering advice on thwarting every known form of electronic threat, including the recent denial-of-service attacks, viruses, system break-ins, equipment theft and interception of network traffic. The book is written by Georgetown University professor Dorothy Denning, and is free to CSI members and available for \$10 to nonmembers. (Information Week 28 Oct 96) < www.gocsi.com/ >

SCHOOLS EYE INTERNET II SHOPPING LIST

As colleges and universities gear up to take advantage of Internet II, the

proposed high-speed backbone network for researchers and scholars who need beefed up connectivity, a debate is emerging on which switches, cables, software, etc. will enable schools to reap the most benefit from their investments. "It's not as simple as, 'You change the backbone and all will be well,'" says Princeton University VP Ira Fuchs. "For individual users to take full advantage of this change in the infrastructure, you'll have to change everything." A key policy decision to be made on most campuses is who gets access to the higher speeds. Administrators at Case Western Reserve have opted for the Cadillac approach -- wiring the entire campus for ATM (asynchronous transfer mode) technology. Other schools are hoping that fast Ethernet at variable speeds will provide more customized connectivity options based on individual need. And some schools are just sitting tight for the moment, waiting to see what the final Internet II looks like: "We're not ready to declare a university direction and strategy on those issues," says University of Virginia VP Polley McClure. "But we are nonetheless moving ahead in order to support specific areas within the university that really need faster networks." (Chronicle of Higher Education 1 Nov 96 A25)

AOL'S NEW BUSINESS MODEL LOOKS A LOT LIKE CABLE

America Online's recent reorganization has some investors scratching their heads, as the company begins to focus more on advertising rather than subscription payments for its revenue. "This cable-network model we think is a reasonable one," says AOL Chairman Steve Case, who's counting on ads and "alternative revenue streams," such as transaction fees for goods purchased over the network, to make up the difference. But some Wall Street analysts say the cable model doesn't compute: The online and cable industries "are like night and day. The cable model isn't correct, because cable is a monopoly that had high recurring revenues and high margins. It's hard to value AOL like a cable company without a meaningful cash flow," says an analyst at Chicago Corp. "The real question is, can they get enough revenues from advertising, transactions and merchandising so that in three years they can sustain themselves from those sources," says a Yankee Group research director. "My gut feeling is that online services, Internet service providers and content developers all will be struggling to say yes." (Wall Street Journal 31 Oct 96 B4)

MEANWHILE, SOFTWARE SHIFTS TOWARD SUBSCRIPTION MODEL

Microsoft has sold its software packaging operation and is planning to distribute most of its Windows upgrades over the Internet, says the company's CFO: "We are starting to evolve our revenue model to subscriptions." The major barrier to adopting that strategy whole-heartedly right now is the lengthy download times it can take users to upgrade their favorite software. The next version of Windows (97 or 98, depending on release date) will definitely be shipped in shrink-wrapped boxes, say company officials, but beyond that, they're hoping that the flexibility of the Internet will allow them to offer more of a cafeteria-plan type approach to incremental enhancements. (Investor's Business Daily 31 Oct 96 A6)

JUST-IN-TIME PCs

Atlanta-based start-up Monorail Inc. is marketing a powerful, Pentium-based PC that runs Windows 95, plays music CDs, and connects to the Internet, all for \$999. The streamlined machine is built around an inexpensive 10-inch flat-panel display connected to a simplified box that eschews multiple microchips and expansion slots, sporting instead a Pentium-class microprocessor, 16 MB of RAM, and a speedy 33.6-Kbps modem. The company promises a two-day turnaround on orders, relying on "just-in-time" manufacturing to reduce its costs. Monorail's offbeat approach to PC selling "will redefine distribution and customer service," says the

president of Creative Strategies Research. (Business Week 4 Nov 96 p52)

PENTIUM-BASED WORKSTATIONS FROM COMPAQ

Introducing its first line of \$4,300-10,200 "workstation"-class computers used for computationally intensive tasks such as 3-D modeling, PC-maker Compaq Computer is broadening its product line to show corporate customers that it can satisfy a full range of customer needs. Unlike Unix-based workstations offered by Sun, Silicon Graphics, and Hewlett-Packard, the Compaq machines will be based on Microsoft's Windows NT, and will use Intel microchips. (New York times 30 Oct 96 C4)

DVD COPYRIGHT AGREEMENT CLEARS HURDLES

An agreement on how to protect data on digital videodisks has been reached, paving the way for DVD players and disks to start appearing on store shelves in the next couple of months. The deal between consumer electronics companies and Hollywood studios calls for an encryption system that will prevent movies issued in DVD format from being copied and resold on videotape or being distributed over the Internet. "It gives an enhanced level of security that we have never had before," says the president of Time Warner's home video unit. (Wall Street Journal 30 Oct 96 B6)

MICROSOFT REORGANIZATION; TOP WOMAN LEAVES

A Microsoft reorganization has created two product groups: a platform and applications group headed by Paul Maritz and an interactive media group headed by Pete Higgins. The reorganization was announced along with the resignation of Patty Stonesifer, who as senior vice president had been the highest ranking woman at the company, and who is now going to Dreamworks SKG as a special consultant. Some industry watchers believe that, as a woman, she had run into a "glass ceiling" at Microsoft. (New York Tmes 30 Oct 96)

PUTTING A LOCK ON LAPTOPS

California-based Qualtec Data Products makes an anti-theft device that operates like a leash on your laptop. The Notebook-Kit consists of a cable that slides through an extra disk slot in the back of some notebook computers (if there's no slot, a small plate can be attached for the cable to loop through), and the machine can then be lashed to a desk leg or table. Although the cable can still be snipped through with bolt-cutters, just like a bike lock, would-be thieves who use the grab-and-run approach will be discouraged. (Investor's Business Daily 30 Oct 96 A8)

PROPOSING A "CRAY" SCIENTIFIC UNIT TO HONOR SEYMOUR CRAY

To honor the achievements of recently deceased computer pioneer Seymour Cray, Wim Nieuwpoort of the University of Groningen has proposed using the unit "Cray." "This would be a very just and appropriate way to keep Cray's name alive among those of other pioneers of science and engineering." To show support for the suggestion, you can send mail to Professor Nieuwpoort at e-nieuwpoort@chem.rug.nl. (HPC Wire 25 Oct 96)

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INFORMATION TECHNOLOGY CONFERENCE

The CAUSE organization's annual conference on information technology in higher education is scheduled for the end of this month in New Orleans. The conference will bring together administrators, academicians and other managers of information resources. For full conference information check out <<http://cause-www.colorado.edu>> or send e-mail to conf@cause.colorado.edu.

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Educom -- Transforming Education Through Information Technology

SAN JOSE, Calif.--Oct. 31, 1996--Diamond Multimedia Systems, Inc. (Nasdaq: DIMD) today announced certain software enhancements for its award-winning Supra NetCommander ISDN modems. The new driver software, version 3.00, provides support for Microsoft's recent updates to the Windows 95 operating system, including the ISDN Accelerator Pack for Windows 95 (version 1.1) and the Windows 95 OEM Service Release 2 (OSR2). Current Supra NetCommander ISDN customers can obtain the new driver software directly from Diamond's Web site (<http://www.diamondmm.com>), ISDN BBS, electronic services or through customer service.

By supporting the new ISDN Accelerator Pack, Supra NetCommander ISDN users now have the choice of selecting either Microsoft's Multilink-PPP or Diamond's bandwidth-on-demand Multilink-PPP. "Diamond's bandwidth-on-demand feature is valuable because it enables our customers to save money by paying only for the bandwidth they need," said Paul Corning, ISDN product marketing manager for Diamond Multimedia. "The Supra NetCommander ISDN can initiate a call using a single channel, then automatically add or drop a second channel depending on the amount of data demanded by the user."

The new ISDN Accelerator Pack 1.1 from Microsoft supports Multilink-PPP which allows multiple data links to be combined. For example, two 64,000 bps ISDN "B" channels can be combined for a 128,000 bps connection. Additionally, Microsoft's new ISDN Accelerator Pack enables the Supra NetCommander ISDN to answer incoming ISDN data calls, allowing Windows 95 PCs to function as ISDN servers. Microsoft's Windows 95 OSR2 will be included in the shipments of new PCs from a variety of system manufacturers.

With Diamond's new driver software, users can install the Supra NetCommander ISDN over any combination of Microsoft's Windows 95 software (original release or OSR2) and Microsoft's ISDN Accelerator Pack (versions 1.0 or 1.1). To download the Supra NetCommander ISDN version 3.00 drivers including Microsoft's new ISDN Accelerator Pack for Windows 95, check the Diamond Multimedia Web site at <http://www.diamondmm.com>.

SAN JOSE, Calif.--Oct. 31, 1996--Diamond Multimedia Systems Inc. (Nasdaq: DIMD), the world's leading supplier of PC graphics subsystems, this Halloween day announced the retail version of its Monster 3D(TM), a new 3D-only gaming accelerator that brings the same level of technology used in today's state-of-the-art video game arcades to personal computers. Positioned for dedicated PC gamers, the Diamond Monster 3D is a 4MB pass-through 3D graphics subsystem that works seamlessly with most VGA and 2D Windows accelerators that users may already have in their PCs. The accelerator comes bundled with more than 10 frightfully popular games and will retail for approximately \$299 this November. Also debuting is Diamond's first multimedia-based "shocked" audio file about the Monster 3D at www.diamondmm.com/monsterishere.

The Diamond Monster 3D utilizes 3Dfx Interactive's highly touted Voodoo Graphics(TM) engine, one of the highest performing 3D-only chipsets available to consumers. With Monster 3D, PC gamers can experience photo-realistic 3D graphics, lightening-fast, real-time action and incredible freedom of movement while playing today's most advanced 3D games.

Monster 3D's dedicated 3D engine delivers all the high-end 3D special effects gamers have come to demand, without compromising overall system performance (see accompanying chart). Previously, these advanced 3D features were only available in commercial arcade systems or professional

workstations costing up to hundreds of thousands of dollars.

Populated with 4MB of EDO DRAM, the new 3D subsystem supports Microsoft's Windows 95 and MS-DOS operating systems and accelerates games utilizing Microsoft's Direct3D API (Application Programming Interface), the de facto development standard for creating 3D titles under Windows 95; Glide, a popular API used for development of DOS, Windows and coin-op/arcade titles; and other leading APIs. This broad API support is important to developers who want to easily migrate their games from one platform to the other.

Scorching Hot 3D Game Bundle -- A Monster Value

Diamond will package more than 10 popular 3D games with the Monster 3D, including Activision's MechWarrior(R) 2 and Hyperblade; Criterion Studio's OEM version of Scorched Planet; Eidos Interactive's OEM versions of Tomb Raider; Interplay's Descent II: Destination Quartzon 3D, VR Soccer '96(TM) and Whiplash; and Ocean's EF2000; plus Microsoft's Game Sampler 2 for Windows 95, which contains a variety of Direct3D and DirectDraw game samples, including Hellbender and Monster Truck Madness (see attachments).

Numerous top game designers are currently working on titles utilizing Voodoo Graphics technology, promising a steady flow of games in the future. Gamers can expect to see more than 50 Voodoo Graphics-enhanced titles by early 1997, according to 3Dfx Interactive, in addition to all the Direct3D games coming to market.

Top game companies currently working on Voodoo Graphics-enhanced games include Argonaut/GTE Entertainment (FX Fighter), Criterion/Virgin Interactive Entertainment (Aqua'Tak), Digital Dialect/Playmates Interactive (Toshinden), Psygnosis (WipeOut XL, Formula 1) and Rocket Science (Rocket Jockey), among others. More than 125 developers have already joined the 3Dfx Total Immersion developer program.

"The Monster 3D's high performance 3D engine will meet the needs of even the most die-hard gamer," said David Watkins, vice president and general manager of Diamond Multimedia's Visual Systems Division. "We've included a selection of some of today's hottest 3D titles in the box so that gamers can begin enjoying their Monster 3D accelerator the minute they install it. The Monster 3D literally brings commercial arcade gaming to the PC."

"Immersive 3D graphics for the PC gamer have arrived with Diamond's Monster 3D," said Andy Keane, vice president of marketing of 3Dfx Interactive.

"Diamond's driver design and speed enables Monster 3D to incorporate all of Voodoo Graphics' core and advanced 3D features. The result is games powered by arcade technology, bringing realistic 3D graphics and unprecedented performance to the PC gamer."

Product Features and Benefits

With 2MB of dedicated texture memory architecture and 2MB of frame buffer memory, the Monster 3D delivers advanced 3D rendering without sacrificing system performance. High-end 3D features include full-speed Z-buffering; perspective corrected texture mapping; bi-linear and tri-linear filtering; MIP-mapping; double-buffered Gouraud shading; texture compositing, morphing and animation; and per-pixel special effects for transparent and translucent objects.

Additionally, the Monster 3D features a Diamond-designed utility to change refresh rates and power levels. This unique utility gives the user the ability to select different performance levels when running their 3D games and applications.

Wide Industry Support

"Direct3D has gained acceptance in the developer community as the premier 3D API for games," said Kevin Dallas, DirectX group product manager for Microsoft's Internet Platform and Tools Division. "Diamond's Monster 3D takes maximum advantage of Direct3D to deliver compatibility and performance for the new Direct3D-based titles scheduled for the holiday season."

"Falcon Northwest will use only the fastest, highest quality, most compatible components in our gaming PCs. That's why we've chosen the Diamond Monster 3D," said Brent Caldwell, director of marketing and sales for Falcon Northwest Computer Systems, a leading high-end PC gaming system integrator. "The Monster 3D is yet another example of Diamond's ability to combine cutting-edge graphics with full compatibility and great support."

"Diamond is targeting gamer enthusiasts who are looking for high-performance 3D and better content," said Jon Peddie, president, Jon Peddie Associates, Tiburon, Calif. "Our research of the game ISVs indicates the Monster 3D's Voodoo Graphics engine is receiving strong support from the game development community. Combined with its Direct3D capability, gamers should have plenty of titles to use with this board."

"Diamond and Interplay have a long history of bringing the industry's most advanced gameplay to the PC," said Jill Goldworn, vice president, OEM, Licensing and Merchandising, Interplay Productions. "By providing our Descent II: Destination Quartzon 3D, Actua Soccer '96 and Whiplash titles with Diamond's Monster 3D, gamers can look forward to one of the most cutting-edge 3D gaming experience available today."

"The Voodoo Graphics architecture will enable MechWarrior 2 fans to experience high-polygon count graphics and ultra-realistic fast-action gameplay for a premium 3D entertainment experience," said Bobby Kotick, chairman and CEO, Activision, Inc.

"The Diamond Monster 3D complements perfectly Scorched Planet's fast paced all out action, full 360 degree movement and fully perspective textured landscapes. Scorched Planet is ideal in maximizing the benefits from The Monster 3D," said Mike King, VP marketing, Criterion Studios.

"The graphically intense worlds in Tomb Raider really come to life when the game is played using Diamond's Monster 3D with Voodoo Graphics technology," said Paul Baldwin, vice president of marketing at Eidos Interactive. "Diamond's Monster 3D provides PC gamers with the 3D power to completely immerse themselves in the incredible world of Tomb Raider."

Monster 3D will be available in November through distribution and retail channels. For more details, please contact the Diamond Multimedia web site at <http://www.diamondmm.com>.

3Dfx Interactive

3Dfx Interactive, Inc., founded in 1994, is a privately held company headquartered in San Jose, California. 3Dfx Interactive brings together a team of leading professionals from the 3D graphics, video game, multimedia, PC, and semiconductor industries to provide advanced technology that enables new levels of interactive 3D electronic entertainment.

Major consumer and coin-op/arcade OEMs have announced support for the chipset, including Acclaim Entertainment, Diamond Multimedia, Falcon

Northwest Computer Systems, Hewlett-Packard Company, Interactive Light, NEC Technologies, Orchid Technologies, and Williams-Atari-Bally-Midway.

Diamond's Monster 3D Software Bundle

Descent II: Destination Quartzon 3D

Developer/Publisher: Interplay Productions

Interplay's popular Descent II: Destination Quartzon 3D expands the original 3D, 360 degree world of Descent with eight new levels of intensive head-to-head combat against unpredictable, energy-depleting robots. Die-hard gamers will find it difficult to control the adrenaline rush while playing this new mind-scrambling, stomach-turning adventure using Diamond's Monster 3D accelerator.

Whiplash

Developer: Gremlin Interactive

Publisher: Interplay Productions

Interplay's Whiplash is an intense 3D racing game that allows up to 16 players to compete against each other or artificial intelligence drivers in real-time, full-contact racing with one-of-a-kind death-defying stunts. Players test their skills in one of eight prototype Supercars on a racing circuit that pushes both driver and car to the limit.

VR Soccer '96

Developer: Gremlin Interactive

Publisher: VR Sports, the sports division of Interplay Productions

VR Sports' Actua Soccer '96 is a state-of-the-art soccer simulation that uses Virtual Field Vision technology that lets gamers view the perspective on the field the same way real players see the action. Featuring 360 degree, 3D environments, gamers can change camera angles to view the action from any position. The game also incorporates VR Sports' Interactive Motion Capture technology, resulting in very smooth, real-time player movements and increased player control. Up to twenty players can compete in network play.

MechWarrior 2

Developer/Publisher: Activision

One of the best-selling action-simulation games, MechWarrior 2 unleashes 15 customizable BattleMechs(R) and more than 20 intense missions in real-time 3D. Strapped into a virtual cockpit that thunders with every blast, players battle across a variety of planetary terrain in the ultimate 31st-century combat experience. MechWarrior 2 is available on PC CD-ROM and Windows 95.

Hyberblade

Developer/Publisher: Activision

Launching a new generation of cyber-sports, Hyberblade is one of the first fast-paced multi-player futuristic ports titles. Featuring real-time 3D graphics, outstanding gameplay and sensational sound design, the game combines the hard-hitting action of hockey, soccer, lacrosse and extreme skiing. Competing in a 3D virtual arena, players plunge into the ultimate 21st century battle sport without any rules. Armed with a jak (throwing device), a rok (projectile) and a custom armor suit, players charge and

penetrate the opposing team's zone as they avoid bone-jarring body checks and attempt to score goals.

Scorched Planet

Developer: Criterion Studios

Publisher: Virgin Interactive Entertainment

Scorched Planet is a fast paced 3D action/strategy game featuring 19 action-packed missions across seven huge and hostile terrains. With the ultimate balance of strategy and pure adrenaline, the player must emerge from his void existence as a drunken has been and ex-commander Alex Gibson, and take to the skies in his Type 16 Morphing craft to rescue the humans from Dator 5. The Monster 3D version of Scorched Planet being played on a Pentium 120 computer at 640x480 runs at double the frame rate and features realistic environments that are fully lit, fogged and have bilinear filtered textures.

Tomb Raider

Developer: Core Design

Publisher: Eidos Interactive

Tomb Raider is a graphically intense, real time 3D action-adventure game that is played from a behind-the-back point of view. Gamers become the gun-toting Lara Croft, a take-no-prisoners "Indiana-Jones-meets-La-Femme-Nikita" character. When played using the Diamond Monster 3D accelerator with Voodoo Graphics technology, the speed of gameplay and the heroine's fluid movement and texture detail are accelerated to pure beauty. Special effects provide glowing light reflections and shadows like no other.

Microsoft's Game Sampler 2 for Windows 95 Developer: Microsoft

Publisher: Microsoft

Microsoft's Game Sampler 2 for Windows 95 includes demos of the Direct3D games Monster Truck Madness and Hellbender, in addition to various samples of DirectDraw games.

EF2000

Developer: Digital Image Design, Inc.

Publisher: OCEAN of America

The storyline of EF2000 occurs within the next decade, when the key front-line defensive fighter plane for the United Kingdom, Germany, Italy and Spain will be retired from service. The need to provide a replacement to defend the sovereignty of these four nations, at a time of increased instability in the world, is an urgent and critical issue. The EF2000 is the answer -- an agile, single-seat air superiority fighter with a ground attack capability. It is designed to defeat all known and projected adversaries in the air in the defense of our homelands and in support of our allies for at least the next 30 years!

Diamond Multimedia

Diamond Multimedia is driving the Internet multimedia market by providing interactive and connectivity solutions for home, business and professional desktop computer users, enabling them to create, access and experience compelling new media content from their desktops and through the Internet. Products include the tealth and Monster 3D series of media accelerators,

the Fire GL series of professional 3D and CAD accelerators, and the Supra(R) series of modems and NetCommander ISDN adapters. Diamond also markets sound cards and multimedia and Internet upgrade kits. Headquartered in San Jose, CA, Diamond has sales, marketing and technical facilities in Vancouver (Wash.), Singapore, Tokyo, Starnberg (Germany), Clichy (France) and Winnersh (U.K.). Diamond's products regional, national and international distributors as well as to major computer retailers, mass merchants and OEMs worldwide. Diamond's common stock is traded on the Nasdaq Stock Market under the symbol DIMD.

Microsoft Unveils "Internet Studio" at Site Builder Conference

Newest Microsoft Visual Tool for Active Server-Based Web Application Development
Takes Full Advantage of Active Platform Initiatives and Products

SAN JOSE, Calif. - Oct. 28, 1996 - Microsoft Corp. today delivered an alpha version of its highly anticipated Web application development tool, code-named "Internet Studio," to more than 2,000 attendees at the Microsoft Site Builder Conference. A public beta version of Internet Studio will be available for downloading from the Microsoft Web site later this year.

Internet Studio is the complete, integrated development tool for building Active Server Web applications based on open Internet standards. Internet Studio enables developers to take full advantage of server-side processing using Active Server Pages and Active Data Objects - new features of Microsoft Internet Information Server (IIS) version 3.0. In addition, Internet Studio enables developers to incorporate Active Desktop features such as advanced HTML, ActiveXT, JavaT and scripting in the Visual Basic programming system, Scripting Edition or JScript.

"The vision for Internet Studio is to make it easier to build dynamic Web applications that use server-side processing and corporate databases," said Bob Muglia, vice president, developer tools at Microsoft. "In the past, developers have had to jump through hoops to build such applications. Internet Studio integrates the Active Server and Active Desktop tools in an easy-to-use, visual development environment."

Internet Studio Makes Web Development Easier, Drives Web Benefits for Businesses

Businesses have rapidly adopted Web technologies for building intranet and Internet Web applications because of the seamless deployment, cross-platform accessibility, and low-bandwidth capabilities they provide. At the same time, the demand for richer, more user-driven and interactive experiences within these applications has increased the complexity of both Web server and client development. For example, connecting Web applications with corporate databases while preserving the security and data integrity required for a mission-critical application has been very difficult.

"Our customers want solutions based on industry standards to address the 70

percent to 80 percent of their internal development that requires database access," said Ken Miller, chief technology officer of 32X Inc., a leading solution provider. "Internet Studio provides the solution they're looking for by delivering platform-independent HTML to the front-end browser and easy, reliable access to virtually any database on the back end."

Internet Studio Builds Upon Active Server Platform

Microsoft Internet Information Server 3.0 provides server-side scripting (with both VBScript and JScript), state management and access to Active Server Components. Internet Studio provides a work space for building the Active Server Pages that provide these features to Web applications. In many cases, Internet Studio automatically creates the logic and Active Server Pages for the developer.

Active Server Components are any COM-based component that runs on IIS. For example, a financial analysis component (developed as a dynamic-link library [.DLL] or executable [.EXE] component) could be integrated into the Web application using Internet Studio to provide investment results that are returned to the client as standard HTML. Active Server Components can be developed in any COM-enabled tool, including future versions of Microsoft Visual Basic, the Visual C++ development system, the Visual J++ development tool and third-party tools.

Integrated Data Connectivity Tools

Internet Studio enables developers to add data connectivity to their Web applications, making their sites smarter and more interactive. Internet Studio provides this functionality through the use of the following features:

- ' • Design-time controls, a new class of ActiveX Controls that automatically generate the HTML and server scripting logic necessary to add database functionality
- ' • Microsoft Active Data Objects, a new feature of IIS 3.0 that provides server-side database access to any ODBC database, including Oracle, Sybase, Microsoft SQL ServerT, Microsoft Access, the Microsoft FoxPro database system and IBM DB/2
- ' • Data View and Query Designer tools, which work with any ODBC database
- ' • Database Designer tool, which brings the ease of Microsoft Access table-definition tools to the creation and modification of Microsoft SQL Server databases

Team-Based Development With Internet Studio and Microsoft FrontPage 97

Internet Studio is specifically designed for developers, and looks and works like other products in Microsoft's line of visual development tools. Internet Studio uses the same project model as the Microsoft FrontPageT 97 Web authoring and management tool so Web developers and Web authors can collaborate on the same projects and Web sites. They also share the same WYSIWYG HTML and Microsoft Image Composer editing tools.

"We have been working with an early, prerelease version of Internet Studio and are very excited by its development capabilities," said Jonathan Kutchins, president of Exeter Group Inc. "The combination of Internet Studio and Microsoft FrontPage 97 offers a true team-oriented development platform. Our nonprogrammers and programmers can work simultaneously on the same Web site, using tools tailored for their specific needs."

Pricing and Availability

Microsoft is scheduled to release a beta version of Internet Studio in the fourth quarter of 1996 and is targeting the commercial release for 1997. Pricing has not yet been announced. For more information, visit the Internet Studio Web site at <http://www.microsoft.com/istudio/>. Founded in 1975, Microsoft (NASDAQ ^<MSFT^fi) is the worldwide leader in software for personal computers. The company offers a wide range of products and services for business and personal use, each designed with the mission of making it easier and more enjoyable for people to take advantage of the full power of personal computing every day. Microsoft, ActiveX, Visual Basic, Visual C++, Visual J++, FoxPro and FrontPage are either registered trademarks or trademarks of Microsoft Corp. in the United States and/or other countries. Java is a trademark of Sun Microsystems Inc. Other product and company names herein may be trademarks of their respective owners. Note to editors: If you are interested in viewing additional information on Microsoft, please visit the Microsoft Web page at <http://www.microsoft.com/corpinfo/> on Microsoft's corporate information pages.

Kids Computing Corner
Frank Sereno, Editor

The Kids' Computing Corner
Computer news and software reviews
from a parent's point of view

The first Tuesday in November will be here on November 5th. Please take the time to vote for the candidates of your choice. The most effective method we have to shape our nation's future is the ballot box. Stand up, be proud and be counted! --Frank

Word Munchers Deluxe
Hybrid CD-ROM
Ages 6 to 11
MECC
6160 Summit Drive North
Minneapolis, Minnesota 55430
(612) 569-1500
<http://www.mecc.com>

reviewed by Angelo Marasco

If learning is fun, is it really learning? Is it possible to get a good laugh and learn something at the same time? I suspect that if you asked the people at MECC, they would answer "Yes!" to both questions. I also strongly suspect that a lot of fun and games take place in their offices every day. How else can you explain the high degree of humor in Word Munchers Deluxe?

Word Munchers Deluxe stars the Word Muncher, one of the funniest and most lovable characters I've ever seen in a piece of software. The Muncher is a green, frog-like character with an attitude. His huge smile and antics are hilarious. At various times he dances, laughs, makes funny sounds, does flips and flexes his muscles.

The object of Word Munchers Deluxe is to direct your muncher to eat the words on the board that correctly answer the question presented. You choose to play in grade levels one through five. All the grade levels allow you to choose grammar, phonics, vocabulary or sentences. In grammar you may be asked to find action verbs, singular pronouns, plural possessives, etc. In phonics you're asked to find the words that contain certain sound combinations. In vocabulary you'll find rhyming words in grades one and two and antonyms and synonyms in the higher grades. In the sentences category you'll find words that fit in the blank in the sentence. Select "Challenge" and the program will present random selections from all categories. Grades one and two include an additional category, classification. Here you'll find objects that fit the description given.

On the opening menu you are given the option of playing with or without Troggles. What are Troggles? They're mean little characters who are constantly in search of ways to stop the Word Muncher from completing his task. You can play the game without them around which makes it easier to concentrate getting the correct answers. Playing with the Troggles around adds challenge and a little bit of urgency to the game. It is also on the opening menu where you'll choose the grade level to play at.

Clear three boards and you're treated with a Word Munchers Deluxe fractured version of one of several popular fairy tales such as Humpty Dumpty, Old Mother Hubbard, Rapunzel, Hansel and Gretel and a few others. This stuff is really funny! They always feature the Word Muncher and he's no more serious in the fairy tales than he is in the regular game.

The graphics in Word Munchers Deluxe are bright, colorful, sharp and quick with few delays. Delays did occur in some screens, but the length and number of delays varied depending on the video driver I was using. Considering the fact that the hardware requirements ask for a minimum of a 486/50 and I'm still using a 486SX-33, I'd say that the graphics ran very well. All of the images are very highly detailed.

The sounds in this software are constant, varied and of very high quality. Background music is playing constantly. The sounds that the Word Muncher makes are really funny. The Troggles also have a full repertoire of sounds. All the voices are clear and pleasant.

The interface is excellent. Buttons are large and easy for younger children to hit with the mouse cursor arrow. Labels are large and easy to read. Select help and you are taken on a multimedia tour of Word Munchers Deluxe, something I prefer to the standard, dry help you might get from other programs.

The play value of this software is also excellent. I really got a kick out of Word Munchers Deluxe. I found it hard to quit the program because I always wanted to see what the Word Muncher was going to do next or what new surprise was going to pop up. Educational value is very high. This software challenged me several times. While playing it is fun, Word Munchers Deluxe does not cut any slack in the learning department. The categories present questions and words that really force you to think. I did a lot of laughing while I was researching this software, but I also brushed up on some language skills while I did it.

Bang for the buck is excellent. At a retail price of \$24.95, Word Munchers Deluxe fits within my price comfort zone. Actually, because of the exceptionally high quality of this program, it fits way within my comfort

zone. I think that this is an excellent price for a wonderful piece of software that is sure to entertain, educate and delight the little ones.

Ratings	
Graphics	10.0
Sound	10.0
Interface	10.0
Play Value	10.0
Educational Value	10.0
Bang for the Buck	10.0
Average	10.0

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Gaming & Entertainment Section
with Atari User Support

Editor Dana P. Jacobson

From the Atari Editor's Desk

"Saying it like it is!"

As I sit here putting together this week's column, it's Halloween night and I'm looking for a way to sneak past my wife and attack the bowl of candy sitting near the door! I live in the city, and "trick or treaters" are sparse in the neighborhood; we usually end up eating most of the Halloween treats eventually... But, it's still fun to see the kids all dressed up, walking up and down the streets...the squeal of "Trick or Treat!" echoing in the air.

We've got that "Emulator Wars" article for you this week; it's interesting reading. If you're contemplating purchasing an Atari emulator for your PC, this article may provide some assistance. If you've been wondering what's been happening at JTS Corporation you know, the people that allowed Atari to merge with them we've found some news pertaining to their latest endeavors. So, let's get to this week's issue. While you're reading the issue, I'm going to try and find out where my wife hid the leftover Halloween candy!

Until next time...

AtariFest '96 STR ShowNews

ATARIFEST '96 A GREAT SUCCESS

THANKS FOR COMING!

10/29/96 Last Saturday we were pleased to host Toad Computers' ATARIFEST '96, our most recent (and probably final) Atari event. We are most pleased to say that the turnout was not some whimpering echo of years gone past, but was in excess of last year's turnout. Over 200 people came to what some playfully called "the wake," and a great time was had by all.

Darek Mihocka sold a pile of GEMULATOR '96 by demoing its full screen DirectDraw features. Tom Harker of ICD/4-Play was having fun, as always, demonstrating BattleSphere and a new PC-based video capture device called SnapDragon. Greg Kopchak and his daughter Irene came out from Missouri to show off the latest Atari CD-ROMs. And Matt Norcross of Floating Fish Studios showed off their latest creation, the BIRD OF PREY CD-ROM, as well as their Falcon MK-X, EXPOSE, and the audio/video work they do with it. And lastly, Tim and Lynn Hebel (SPUD BOY and his wife) treated us to an all-day live performance of some popular 80's and 90's tunes, all powered by their Falcon, an Ensoniq ASR-10, and a pile of other cool hardware (plus, of course, a generous helping of musical talent).

All in all, it was an event not to be missed. We all had a great time. Again, thanks for coming out and proving, once again, that Atari means

something to people's hearts. We pulled out thousands of ST games, thousands of pounds of surplus parts and supplies, and (I think) really wowed people by showing them just how much stuff we've accumulated over 10 years in business. But hey, that's what it's about, isn't it? We moved an awful lot of stock, and in general poised ourselves for a new era in our existence.

Thanks again, everyone.

Emulators STR Feature

THE EMULATOR WARS

by Alejandro Aguilar R.

Introduction:

When Atari dropped support for its own line of computers, the computer specialists predicted the end of the ST/TT/Falcon systems a couple of years ago. But time shows the opposite of that prediction, and today we have five companies making clones: C-Lab (with its Falcon line), Medusa Computers (with its Medusa and Hades TT clones), Eagle Computer (with its TT clones), Computer Direct (with its DirecT40 and DirecT60 TT clones and its DirectFX Falcon Clone) and even a new contestant in town: A french company called CENTEK that is in the process of creating a new Falcon clone with a 68040 CPU and a few nice extras. This fact positions us in second place after the PC compatibles in the category of max number of clones (Apple at this moment only has one or two Mac clone makers).

But this is not the end of the story. Some companies realize that it was a very good idea to find a way to make a standard PC compatible computer run Atari programs. And they appear to have succeeded... Wait a minute... Why make an emulator program to run Atari ST programs on PC compatibles?. The answer is very simple and it's contained in two facts:

- '• Some ex-Atarians have left our community and have bought PC-compatible computers; and
- '• buying a PC compatible is in many cases more "affordable" than buying an Atari clone.

Add to the above two facts that the actual Atari compatible programs are very capable when compared with their Windows counterparts and are less expensive as well; and you have all the ingredients needed to convince yourself to buy an Atari Emulator.

The Contestants:

In this review we use only three emulation programs that have their demo files posted in the Internet. The only requirement is that the emulator works entirely in software. This requirement only leaves out two Emulator programs: the Janus Emulator, which uses a board that contains the processor, and a new Emulator that C-Lab is developing and is also a board with the processor and other things. (I don't have any more information about it, but it's supposed to be Falcon Compatible). These types of emulators will be the subject of another review.

I want to say that this review isn't related to or sponsored by any of the companies which develop the programs described here. Even this review was

written without any knowledge on the parts of any of these companies (sorry boys!, it's more impartial this way).

The three companies are the following:

1. EMULATORS Inc. (formerly Branch Always Software), was the first company to produce this type of program. They created Gemulator at the beginning to put in the Atarians' hands an affordable alternative to buy a real Atari ST (at that time some models of PCs were cheaper than buying a similar ST configuration).
2. AIXIT, not much to say about this company. It appears that the other product that it manufactures is a memory expansion for the TT that permits the use of SIMMs in that machine.
3. APPLICATION SYSTEMS HEIDELBERG, first known for a VDI accelerator program that struck the Atarians in Europe and is now to be found on our side of the Atlantic: NVDI. Later they came up with another innovation: MagiC, a re-engineering of the standard TOS/GEM, written 100% in assembler and faster than our standard O.S., even in Multitasking, that is their strong point. MagiC_PC is based on this new O.S.

The machine that we used to perform the programs and tests is an IBM ValuePoint 6482, with a 80486/33Mhz processor, 8 MB RAM and a 1GB EIDE hard disk. The system comes with an S3 chip set that speeds Windows operations. The Operating System is Windows95 (required by two of the three emulators to work). For comparison purposes, I ran the test and the same programs on my 1040STe with 4MB of RAM, monochrome monitor and a Hard Disk.

Strategy:

Although the three programs have the same purpose - to run Atari programs on a PC - the strategy for each one of the three programs is different:

- '• For GEMulator, the aim is the perfect emulation of a plain Atari ST/STe.
- '• For Tos2Win, it is the integration of your Atari programs into the Windows95 Environment.
- '• For MagiC_PC, the goal is to build a complete platform that can run the same programs - without recompiling on an Atari, a Mac, and a PC, with each taking advantage of the latest features of the newest

Operating Systems.

Now that the different programs have been presented, it's time to put the three emulators to the test and let them compete head to head.

Display:

The first point (and maybe the most important in a graphic environment like the Atari systems) is the method of displaying things on the monitor. Although the three would seem to generate the display in the same way, actually the three emulators work differently.

Tos2Win emulates the ST standard modes and you can also configure its own display resolution with the option of color mode (256 colors only). It tries to create the display the same way as all the other Win95 programs. It even uses the same pointer as Win95. For that reason the display has been optimized for the drawing of windows, alert boxes, text output and other types of standard VDI calls. The problem resides in the times when you try to run programs with extensive graphic output, like PageStream, Positive Image, game programs and other types of graphics software. When you try to write directly to the display (as most game programs and paint software does) some programs slow down and appear almost to freeze. Others, like PageStream, simply present a black-filled window when you open a document.

Another problem found is its inability to display Inverse Video, for example, as some programs do in sections of the display when you choose something in it, like a selection button or an object in a game.

GEMulator96... business as usual. It emulates the three ST displays almost perfectly. There is another mode which uses the DirectX display mode of Win95 to speed things up and use the full display, but I can't use it because it is disabled in the demo version. The program uses its own pointer, so you must click on the window, or on the button in the Win95 taskbar to activate it. It runs all the programs that I have tested without any problem, and almost as fast as my STe. No more to say.

MagiC_PC also has the three standard ST resolutions, and also has the ability to reprogram the display in the resolution of your choice - you can even choose a higher resolution than the one your display has -, and you can choose the colors that you need (2, 4 or 16 colors). You can use more colors, but this requires the help of an additional utility (see below). This program also has its own pointer, so you need to click in the window to activate the emulator pointer. It is slower than GEMulator96 (in fact, the two programs are the slowest of the group, I guess because of the better emulation). There are no major problems in compatibility here. As a rule, if you can run a program under MagiC on an ST, you can run your program here.

Hardware Emulation:

The second point of comparison between the three contestants, but no less important, is the hardware emulation that they perform. As you know, the PC's don't use a Motorola 68K or compatible CPU, but an Intel one. For overcoming these problems, the three emulators have 68000 CPU simulators inside them. Why a 68000 CPU and not a 68030 or higher CPU? The answer is simple: this makes the emulator more compatible with the majority of programs made for the Atari computers (remember when the TT first went on sale? Only a few programs could run on it).

GEMulator seems to forget nothing that is known to a real ST/STe. You find the blitter, the Yamaha sound chip, the STe 8-bit sound capability, and the other things that make an ST just an ST. It even includes in the Quick ST screen accelerator program (if you use the ROM card), and a 68000 debugger. One interesting thing about the port emulation is that, if you like, you can redirect the parallel and serial ports for use exclusively with GEMulator (if you want to use your PC only to run Atari programs !!!!), or "freeze" the port temporally. With GEMulator you can't use the ports in Multitask with other Win95 programs. The years that Darek M. (the author of GEMulator) dedicated to the program makes it the most efficient of the three (see table 1).

MagiC_PC appears only to emulate a plain ST. It only has the Yamaha sound chip support. The ports are emulated so that you can share with other Win95 programs the standard way. So you can't manipulate it directly. The hardware emulation is the most speedy of the three (in contrast to the display speed - it's the slowest - but A.S.H. promises to fix it in a standard way - see below).

Tos2Win only has the basics for a workable ST. It has no sound, no blitter emulation, etc. It appears that the most important thing in the emulator is the O.S., that also appears to have to compatibility with any ROM TOS that Atari has made. The only apparent hardware strength is their MIDI ability. It even has a switch to accelerate the internal clock for MIDI purposes. But the question is where the ports have to be connected, or how to connect them.

TABLE 1 GEMbench 4.03:

Time taken to perform the Tests:

	1040STe	GEMulator96	TOS2WIN	MagiC_PC
Total Time:	2:12.28	2:25.00		2:13.53
2:43.30				
Display Time:	1:27.35	1:53.97		1:27.28
2:20.96				
CPU Time:	0:47.09	0:34.29	0:46.48	
0:27.59				

Storage:

O.K. Now we have all the components to run a ST program. But where will you save those programs and their data?. The three programs resolve this in different ways. The king of the CPU in this category is MagiC_PC. Not only can you use the actual Hard Disk configuration on your PC, but you can use Virtual Hard Disk Drives (in fact you must load your auto programs, accessories and MagiC support files from one of these). If you have a diskette that is formatted in an ST format, you can also configure a Virtual Diskette Drive, and with the help of the startup window, you can "download" the diskette to the VDD and use it without any problem. And the best of all is that you can use all of the above at the same time. Add to all these features the ability of MagiC 5 to use long filenames and Win95 compatible file systems, and you have the most complete system in town (remember that you can have the same features on both Macs and Ataris thanks to the MagiC 5 O.S.).

GEMulator has the same characteristics, but with a limitation: if you want to use VDD or read an ST formatted disk, you can't use a normal PC partition, only the VDDs. The other limitation is that you can only use four VHDDs with a capacity of 30 MB each. It's assumed that GEMulator can use the extended file system features of MagiC_PC, but I haven't been able to make it work at this time. Tos2Win only uses the standard Hard Disks of the PC. So you can't read ST formatted disks or do other nifty stuff.

Performance Tests:

What is life without the little challenges. Here are some tests performed to give an idea of how each one of the three contestants measures up. First is the remaining portion of the GEMbench test that is referenced in table 1:

TABLE 2

GEMbench 4.03: Percentages of each test as displayed:

Test:	1040STe	GEMulator96	TOS2WIN	MagiC_PC
GEM Dialog Box:	146%	98%	57%	269%
VDI Text:	239%	178%	1043%	273%
VDI Text Effects:	156%	230%	1189%	358%
VDI Small Text:	161%	176%	862%	301%
VDI Graphics:	108%	162%	738%	264%
GEM Window:	225%	44%	110%	391%
Integer Division:	98%	557%	511%	1030%
Float Math:	98%	165%	53%	- - -
RAM Access:	98%	172%	85%	121%
ROM Access:	98%	190%	86%	116%
Blitting:	624%	95%	268%	128%
VDI Scroll:	310%	163%	778%	315%
Justified Text:		248%	112%	433%
VDI Enquire:	94%	100%	93%	244%
				169%

New Dialogs:	113%	76%	49%	176%
Stat. Display	220%	130%	510%	262%
Stat. CPU:	98%	246%	183%	422%
Average:	187%	161%	423%	296%

Note that some Emulators distort the internal clocks and represent the tests as if the emulator is faster than it actually is. Believe only in Table 1's reported timings. (I have used this table (Table 2) only for informational purposes). The features listed in the next two tables represent exactly what you would expect them to. I chose the image programs because they use intensive CPU processing for decompression and preparing the image, and extensive display operations for displaying the selected image. The first program uses a window to display the image, and the second writes directly to the display:

TABLE 3

Time taken to load a TIFF image (486x287 pixels, 256 colors / 156989 Bytes long) into Positive Image ver. 1.1:

Test:	1040STe	GEMulator96	TOS2WIN
MagiC_PC			
Time (Minutes):	1:53.72	2:22.21	2:56.10
	3:10.34		

TABLE 4

Time taken to load a GIF image (500x400 pixels, 256 colors / 103,533 Bytes long) into MGIF 5.2 Beta:

Test:	1040STe	GEMulator96	TOS2WIN
MagiC_PC			
Time (Minutes):	0:12.90	0:21.54	>5:00.00
	0:27.29		

Compatibility:

We've mentioned this above, so there's not much more to say. In general, the better compatibility in all aspects is GEMulator96. Only protected programs, games that do strange things to or expect strange things from the hardware, do not work in it. Programs that write directly to the display (or any other hardware) will probably work with it. As I wrote earlier, if you work with programs that are MagiC compatible, you can use MagiC_PC (GEMulator also can work with MagiC). With Tos2Win I had mixed feelings. I suggest that you try your programs before you buy this emulator. Also at times one program may work, but other times it seems not to.

Programs used to perform the compatibility tests are PageStream 2.2b, Positive Image 1.1 (graphics package), Coltris (game), MahJong II (game), Stello (game), Three Yahoo (game), 7th Up, Everest 3.5e, Zcontrol 0.24 (that does not work in the MagiC_PC demo), Selectric File Selector (does not run in Tos2Win), Oxyd (game) (mono & color - only works in GEMulator), Atari Works (does not run in Tos2Win and I can't run SpeedoGDOS in GEMulator due to the lack of loading of Auto programs in it) and Gemini 1.2e. I expect in the future to test other programs that are more CPU intensive. One potential problem during the tests is that GEMulator doesn't work at all with the MagiC that comes with MagiC_PC. It can't copy or move files between folders or drives, load the programs in the auto folder, run Appline, use the VHDD mode, and the file selector of MagiC had errors reading directories (I had to run Selectric manually). Other than these problems, it runs fine.

Future:

In this world nothing is quiet. Everything changes with time, even

computers and programs. And our three emulators aren't exceptions. With the addition of the special characteristics that aren't available in the demo version, Gemulator96 promises that a coming update will emulate a TT, with its 68030 processor. And it appears to be the base for another emulator for the PC: a Macintosh version (code named Recycler). Tos2Win also promises several updates (that will be free - they only want the initial fee for the CD - which, in my opinion, is not cheap - approx. D.M. 250 (almost U.S.\$ 200.00 as I read on some sites), one of them is the fix for some display routines.

MagiC_PC has suffered from some transformations since it was conceived. Early versions work with MagiC 4, then later they added the long filename support and support for big DOS partitions, perfecting the Multitasking and they created the new MagiC 5. So the final demo - and the final product - is a finished product. The only weak point of the product - the display - will be fixed with an add-on: the new NVDI for MagiC_PC. It will substitute various routines of the VDI part of the MagiC O.S. with optimized code for the GDI (the equivalent part of Windows). In addition to speeding up the display, and of course permitting SpeedoGDOS compatibility, it will expand the number of colors displayed by the display of MagiC_PC to thousands and millions, depending of course of your PC video card.

Conclusions:

All three of these programs are very good. But, as we saw above, each one has characteristics that differentiates one from another. I personally can't recommend Tos2Win as your definitive new Atari-in-a-PC clone. It is very incompatible and unstable (in the tests I had to reinstall it several times). If your goal is to run some Atari programs that strictly follow the Gem conventions (not the MagiC ones), Tos2Win could be your emulator, but it limits you greatly.

If you want an "Almost-Exact Image" of your ST/STe, Gemulator96 should be your choice. It even emulates STe sound via a Soundblaster card. One recommendation instead: buy it with the card (if you plan total compatibility), or use with an original MagiC (2 or 4 for Atari - not MagiC_PC). My experience here demonstrates that it is not very compatible with the MagiC_PC O.S., as Emulators Inc. tries to convince us. Do not buy it as an upgrade to MagiC_PC!!!!.

If your plan is to take advantage of the latest in operating systems for your Atari and maintain good compatibility (as far as the MagiC O.S. permits us), and you have a little more money to spend, MagiC_PC will satisfy you. Buy it with NVDI for MagiC_PC, or you will have several frustrating hours in front of your new emulator because of the lack of True-Color resolutions and good speed if you want to run it with other Win95 programs. In this aspect it is the better of the three emulators.

JTS Corp. Announces Far East Distribution Network

SAN JOSE, CALIF. (Oct. 29) BUSINESS WIRE -Oct. 29, 1996--
Leading Asian Distributors to Support JTS' Full Line of Hard Disk Drives JTS Corp. (AMEX:JTS), a world leader in the development of ultra-slim hard disk drives and portable storage solutions, on Tuesday announced major distribution agreements with leading Far East distributors Karma Asia, Alpine Australia, Synnex (Japan and Australia) and TriGem Korea. The agreements call for Far East distribution of JTS' full line of 3.5-inch and 3.0-inch hard disk drive storage products.

"With a good percentage of the worldwide hard disk drive demand coming from

Asia, it was critical that we put the resources in place to meet the needs of this vital market," said Tom Mitchell, president and chief executive officer of JTS Corp. "By working together with leading Far East distributors, JTS' line of storage products will now be well supported in these key channels." "The Asia Pacific region is increasingly becoming an important region for disk drive sales," said Crawford Del Prete, vice president, Storage Research IDC. "In 1996 we expect that 21 percent of desktop drives and 47 percent of mobile drives will ship from OEM drive suppliers into this market."

JTS' current products include a family of low profile, high capacity 3.5-inch disk drives designed for desktop applications and JTS' Nordic line of ultra-thin, high-capacity 3.0-inch disk drives for mobile computing with heights as thin as 10.5mm. JTS products are encapsulated to lock in quality and protect against handling and ESD damage, improve drive reliability and provide easier installation. By encapsulating the drive, the installer is able to handle the unit on all surfaces without touching the PCBA. This encapsulation technology has allowed the company to achieve field return rates approximately 300 percent lower than industry averages.

"JTS' durable hard drives provide cost-effective solutions for both the desktop and portable segments," said Paul Lee, executive managing director at TriGem. "By adding the JTS line, we are better able to meet the needs of these aggressive markets." "We are confident that JTS will open new avenues in the Far East hard disk drive market," added Mitchell. "With Karma, Alpine, Synnex (Japan and Australia) and TriGem's distribution efforts, JTS will be able to offer consumers both 3.0-inch portability as well as a very competitive line of 3.5-inch hard disk drive storage products."

JTS Shipping Portable Computer Industry's First...

SAN JOSE, CALIF. (Oct. 29) BUSINESS WIRE -Oct. 29, 1996-- Nordic 3.0-inch family reaches capacities up to 1.6GB JTS Corp. (AMEX:JTS), a world leader in the development of ultra-slim hard disk drives and portable storage solutions, on Tuesday announced three additions to its Nordic family of 3.0-inch hard drives including the portable computer industry's first ultra-slim 1GB hard disk drive.

The N1080-2AR measures just 10.5mm high making ideal for low-profile, lightweight portable computers. For the high-end portable capacity market, JTS added the 12.5mm high N1620-3AR and the N1440-3AR hard drives offering 1.6GB and 1.4GB respectively. "The N1080-2AR, which is now shipping, packs a full gigabyte into one of the most compact portable form factors available," said Tom Mitchell, president and chief executive officer of JTS Corp. "The merits of this ultra-slim high capacity drive are already causing the mobile computing industry to take action on implementing the 3.0-inch form factor in their next generation of lightweight portable products."

"JTS has opened the door for a new storage solution for the future of mobile computing," commented Phil Devin, vice president, Storage Research, Dataquest. "These drives will allow portable OEMs and integrators to achieve leading capacities, quality and performance all at a lower cost per megabyte than 2.5-inch drives."

The thin profile of these three new drives provides reduced size and weight benefits without sacrificing storage capacity. Storage intensive applications, such as large databases, multimedia and video are not limited to desktop PCs. Mobile users now have the capacity and performance they need to enable their use of more demanding computing applications.

JTS designed these drives to achieve exceptional performance, with SMART capability, industry leading power management commands, seek times of less than 14msec, disk rotation speeds of 4103 RPM, cache buffer sizes of 128K and PIO Mode 4, Fast ATA-3 interface for transfer rates of up to 16.6MB/sec. Advanced patented electronics and a unique voice coil motor manufacturing technique provide these drives with higher performance, better noise immunity, improved heat dissipation and higher reliability than competitive alternatives. Embedded servo eliminates the need for thermal recalibration making these drives ideal for multimedia applications. Additionally, the compact, rugged Nordic family of 3.0-inch hard disk drives are encapsulated to lock in quality and protect against handling. Able to withstand 350Gs, the new Nordic drives offer high reliability and shock resistance.

PCMIDE (Personal Computer Memory Integrated Drive Electronics) Connectors make the Nordic family ideal for hot-pluggable applications. This innovative ATA-3 enhanced IDE interface was designed by JTS and adopted by the Small Form Factor Committee. Allowing more than 10,000 insertions, it ensures data safety when power is disconnected and protects the circuit board from ESD damage. The N1080-2AR, N1440-3AR and the N1620-3AR hard drives are now shipping. Offered with a three year warranty, the 3.0-inch drives allow for 80 percent more capacity at a lower cost per megabyte than competitive 2.5-inch products.

JTS Corp., with headquarters in San Jose, was founded in 1994 to design, manufacture and supply enhanced-capacity hard disk drives for the notebook and desktop personal computer market. JTS offers an innovative line of ultra-slim 3.0-inch disk drives that provide higher capacity and lower cost per megabyte than competitive alternatives in the portable computer market.

The president and chief executive officer of JTS, Tom Mitchell, was formerly the president and chief operating officer of Conner Peripherals and co-founder, president and chief operating officer of Seagate Technology. The company currently employs more than 4,300 people worldwide including manufacturing facilities in Madras, India.

Entertainment Section

More 'Big News' From Don Thomas!
PlayStation News! PSX Games!
And more...

From the Editor's Controller - Playin' it like it is!

Still no new information regarding the pending releases for the Jaguar, due next month. We have contacted Telegames and we're awaiting news of review copies to arrive. In the meantime, we have started to get feedback from Sony, including one of their latest games. It's interesting how much difference there is in two companies and their respective products. There was a ton of red tape to go through to get Jaguar product, from Atari and the third party publishers; Sony has been more responsive, and quicker. There is still some time lapse, but I feel more confident dealing with Sony and its third party supporters than I ever felt with Atari and theirs...overall. And, still no word from Nintendo...

Like you, we're all anxiously awaiting to see these new games for the Jaguar. We're looking forward to reviewing these games for you; to see what types of games we've all been waiting for the past months. As we learn more, we'll pass the info along.

Until next time...

Industry News STR Game Console NewsFile - The Latest Gaming News!

Psygnosis' Highly Anticipated Wipeout XL Blasts ...

FOSTER CITY, CALIF. (Oct. 29) BUSINESS WIRE -Oct. 29, 1996--Psygnosis announces the release of Wipeout XL(TM), the highly anticipated sequel to the original ground-breaking futuristic racer, WipeOut(TM), which virtually defined the notion of next generation video games. Like the original game, Wipeout XL pits the player against the fierce competition of anti-gravity ballistic racing. This time around, however, the developers have taken out all stops with a wide range of improvements and enhancements.

Wipeout XL features eight all-new tracks and two hidden tracks. Players choose from four racing classes (double the original), including difficulty curves for the novice driver, and a super-fast hidden Phantom class for WipeOut veterans. There are 15 ships (the original has eight), 11 weapons (up from the original six), along with other enhancements such as checkpoints and pit-stops. An energy bar has been implemented and, unlike the first game, ships will be destroyed after too much collision damage (although pit-stop energy blocks give you a fighting change of staying in the race).

Wipeout XL's pounding techno soundtrack features some of the most popular electronic underground music artists, such as Future Sound of London, Fluke, The Chemical Brothers, Underworld, Photek, The Prodigy, Daft Punk, Source Direct, Orbital, and Leftfield. Psygnosis has teamed up with Astralwerks, the electronic music division of Caroline Records to produce a compilation Wipeout XL soundtrack which is now separately available. "This is the first time a separate album of the exact soundtrack found in a U.S. PlayStation game will be sold under a major record company label," said Mark Beaumont, senior vice president, marketing for Psygnosis, U.S.A. "The techno-style music in Wipeout XL is as cutting-edge as the game, making the two inseparable."

PlayStation Shipments Hit 9 Million

FOSTER CITY, Calif., Oct. 31 (UPI S) -- Sony Corp. has reported (Thursday) that shipments of its PlayStation video-game console have reached 9 million units worldwide, including 4 million in Japan, 2.8 million in North America and 2.2 million in Europe. Sony says it will increase PlayStation hardware production at its manufacturing facilities in Japan to 1 million units per month in November and December.

Yen Fall Brings Production Back Home For Sony

Sony Corporation is to begin producing all Sony PlayStation game terminals in Japan in the light of the recent fall of the yen. In the last few months, the currency has slipped from rates of around 105 yen to the dollar to 114 yen making Japanese made products more attractive to overseas buyers. The move will also make it easier for Sony to source components from Japanese manufacturers. Production will be centered on its plants in Kisarazu, Chiba prefecture, and Minokamo, Gifu prefecture. The former plant is already making PlayStation machines.

Sony To Stop U.S. Production of Game Machines

TOKYO, Oct. 30 (UPI) -- Japan-based Sony Computer Entertainment Inc. plans to stop manufacturing its popular PlayStation home video game machines in the United States and step up production in Japan, a company spokesman said Wednesday. "PlayStation is enjoying a large increase in demand, so we are shifting production to Japan because it is more efficient," Sony spokesman Konosuke Shimizu said. The company hopes to speed up production by procuring parts from domestic suppliers. Sony plans to increase its current monthly production target of 700,000 units to meet higher-than-expected demand. "Starting in December, we will start marketing PlayStation in Hong Kong, Singapore, Thailand and Malaysia," Shimizu said.

The King's Armada Has Arrived! King's Field II...

REDWOOD CITY, CALIF. (Oct. 31) BUSINESS WIRE -Oct. 31, 1996--With the incredible success of King's Field for the Sony PlayStation, and in response to hundreds of requests for more, ASCII Entertainment is proud to announce King's Field II, an all new action-adventure role playing game. A whole new quest is set before you as you wander an even bigger, more menacing world of beautiful, fully rendered 3D polygon texture mapped splendor!

Great Expectations

The sequel to the smash hit, King's Field II will be released November 20 by ASCII Entertainment. Already receiving praise, one game tester said, "King's Field II is the closest thing that you can get to a virtual reality action-adventure without buying a headset. It is a highly immersive 3D adventure that is completely captivating. It's so addicting, they're going to have to cut the power to my house to get me to stop!"

Features

Featured in King's Field II are a barrage of innovative changes from the original epic adventure. ASCII Entertainment has made improvements and additions in all of the major categories of gameplay. A great deal of energy has gone into listening to the suggestions of the consumers, enhancing the quality of an already near-perfect game, and coming out with possibly the most advanced game yet for the PlayStation.

Graphically, ASCII Entertainment improved the character definition for the villagers and enemies. In the surrounding world, ASCII Entertainment included more of everything -- villages and outside scenery, towns folk, enemies, hidden treasures, weapons, and secret areas -- all in the same captivating graphic quality as the original!

Of course, ASCII Entertainment didn't stop there! In the sound department, improved CD quality music has been added. Enemies grow louder as the player approaches, and the music provides an eerie, haunting realism. A new overall soundtrack will keep your speakers pumping with live CD quality music throughout the game.

With all of these new factors, plus a larger quest in a world so entirely huge, it could take months to explore every nook and cranny! King's Field II is destined to be a hit! With all the other enhancements carefully being added in, who knows what else ASCII will think of before the game hits the shelves!

Jaguar Online STR InfoFile

Online Users Growl & Purr!

BIG news!

By Donald A. Thomas, Jr.

The election is coming up. That seems to be important. It's big news each night on radio and television lately. When I think hard about it, I am not sure why. Many people feel, as do I, that politicians say what they have to in order to be elected. Who knows what they'll really do in office. Even if I gloss over that admittedly defeatist viewpoint, there remains another popular viewpoint that the election is already decided... at least this year anyway.

I suppose it's tradition. We all have to talk about it and hear about it just because it's America's ultimate soap opera. After all, obvious slam dunk elections have turned up as big misses at the polls in the past. It could happen again. As for me, I'd just love to see an innovative game company develop a program that pitched famous politicians against each other. Since the early days, when Activision released their blocky "Boxing" game in 1980, one-against-one bouts have been a popular video game subject. I'd love to see Clinton and Dole go at it in a video game. Perot makes a great on-deck challenger too! I suppose they'd have to V-Chip the game and gray out any blood scenes. I should run for President. I'd love to be in that game to throw some punches. Hey, everyone, write me in! <g>

"Turning Point", a popular television news magazine, featured an in-depth life-after-death segment the other night. Do you suppose there's a coincidence that Halloween is around the corner? Nah, they wouldn't be that corny, would they? The only explanation is that it must be big news. Personally, the entire concept seems to me to be more philosophical than newsworthy. If it wasn't for my family tying up the television, I would have preferred to play "Crypts of Chaos" (20th Century Fox, 1982), "Demon Attack" (Imagic, 1982), "Entombed" (USgames, 1982), "Frankenstein's Monster" (Data Age, 1983), "Ghostbusters" (Activision, 1984), "Ghost Manor" (Xonox, 1983) or "Haunted House" (Atari, 1981). Although none of those equal the notoriety earned by the likes of "Asteroids" (Atari, 1981) or "Missile Command" (Atari, 1980), they were all fun, share a spooky theme and helped wear the metal contacts thin on my Atari 2600 cartridge port.

So the world is changing. No one cares if our President ever inhaled and schools turn in six year olds for kissing classmates to show affection. (Just imagine the outcry if "Custer's Revenge" (Mystique, 1982) was released in today's climate.) Sports games are hot news to gamers, but the mainstream press never mentions them. There's not enough room in the newspaper after you cover the more important non-sports news you know what I mean, don't you? The strikes, the spitting, the car crashes while boozed up. I think there's more real game action at Little League. For me, a good game of "Real Sports Baseball" (Atari, 1982) or "Bowling" (Atari, 1978) gives me all the virtual sports action I ever needed and the players never wind up being arrested. Yes, the world is changing. "PacMan" peaked when he made the cover of "Time Magazine" in the October 25, 1982 issue.

They don't still sell Ralston's "Donkey Kong" cereal (1982) any more, right? I don't know. I stopped helping to pick cereal when I stopped seeing those cool video game promotions on the backs of packages each month. Yeah, I see them sometimes now for a complete PlayStation system or a Big Screen TV, but it's not the same. They used to give away trips to Atari Headquarters and full size arcade games. I still have a couple dozen of the scratch off cards handed out at McDonalds restaurants in 1982 based on popular video games. Why don't they do things like that anymore?

It was April 1976, when Atari first released the coin-op version of "Breakout". I remember sharing time with a friend at a convenience store well past midnight on one of those machines. Through the cigarette-stained

glass and our own smoke filled eyes, we would stare at colored "bricks" and bouncing pixels for hours on end driving the four-cornered ball past the front rows of bricks and into a wild frenzy against the back rows through a corridor at one side of the screen or another. Back then, things were different. No one heard of Aids and teenagers were afraid of being caught at something rather than catching something.

I wish I kept the old newspaper clippings I saved back then. I one day threw them away because it was clear to me then that video games and home computers were front-page topics forever. I never had enough room to store all that paper. There were great video game magazines then just as there are now too. Back then, though, even "Playboy" and "Popular Science" talked about the new form of adult toys that integrated sizzling visuals, tantalizing sounds and responsive joysticks into one heck of a good time. Do they still cover those topics anymore?

So who is buying these great new video games in stores today? Do none of these people watch television or read newspapers? Why is it that the video game industry is so huge, but new product releases and great top-notch programmers hardly ever rate in the entertainment sections? Where is Warren Robinett lately? Who's he dating? Is he married? Children? Why isn't he ever in the celebrity round-up section of USA Today? (Please don't tell me you don't know who he is. You'll really make me sob.)

By the way, one of the institutional founders of the gaming industry proverbially died a few weeks ago. JTS, a disk drive company, absorbed all of Atari Corporation's assets and pretty much soaked it all up with few traces of the monolith that once stood. Ever see the witch melt in Wizard of Oz? Kind of the same thing, except muted. No big deal though. After all, Atari's final fall is not nearly as big news as predetermined elections, kissing babies, spitting athletes and Halloween stories of an afterlife. Is it?

--Don Thomas
75300.1267@compuserve.com

(The best people to ask these questions are those who have exposure to the public. If you believe Atari left us without saying goodbye, contact Dateline" at dateline@nbc.com. If you REALLYLY believe, then send this article to 10 of your friends in e-mail. AND if YOU REALLYLY, REALLYLY believe, mail a few to newspapers or other news programs. A letter in your own words would be great!) Permission is granted to freely reprint this article provided the author duly credited. (10/26/96)

Below please find descriptions of the events PlayStation will be participating in through January 1997:

LOOK WHAT PLAYSTATION IS UP TO!
COME CHECK US OUT THROUGHOUT THE COUNTRY!!
THERE'S SOMETHING FOR EVERYONE!
NATIONAL PROMOTIONS
NESTLE/PLAYSTATION

Next time you eat your favorite candy bar from Nestle, you'll have a chance to win a game for your PlayStation game console! Collect one free designated PlayStation video game and you're automatically entered in the Nestle and PlayStation Extreme Excitement Sweepstakes. All you have to do send in 10 UPC Symbols (bar codes) from any Nestle singles including Butterfinger, Baby Ruth, Nestle Crunch, 100 Grand, Butterfinger BB's, Buncha Crunch, and one UPC from a selected PlayStation video game. You can win one

of the following games:

SOFTWARE FEATURED:

Beyond the Beyond, Samari Showdown III, Blades of Blood, Bogey Dead 6, Epidemic and King of Fighters.

When you send in your UPC's you are automatically entered in the Nestle and PlayStation Extreme Excitement Sweepstakes. Grand prize is a Sea Doo. First prize is one K2 snowboard. 100 second prizes include a PlayStation game console and video game and 5000 third prizes of a limited edition PlayStation t-shirt. So eat, play and win one PlayStation game when you enter the Nestle and PlayStation Extreme Excitement Sweepstakes.

NATIONAL TOURS

SONY AUTOSOUND-PLAYSTATION TOUR

October - December 1996

Check us out at our cool, 18 wheeler PlayStation truck at the following events around the country through January 15, 1997. You'll find the truck at various colleges, NASCAR events and music events. Don't miss out on the fun!

DATE	MARKET	EVENT
November 1-3	Miami, FL	NASCAR Busch Grand Nat'l
November 15-17	Ellenton, FL	Sony Gulf Coast Retailer
November 19-21	Jacksonville, FL	U.of No. Florida
Collegiate Health & Fitness		
November 23	Miami, FL	H&C Retailer PR event
November 24	Miami, FL	Battle of the Bands
December 2-3	Tuscaloosa, AL	U. of Al. Collegiate
Health & Fitness		
December 5-6	Montgomery, AL	Alabama St. Collegiate &
Fitness		
December 13-15	Jacksonville, FL	Cruisin Tunes Retailer
Event		

WINTER MISSION TOUR

October - December 1996

Winter Mission is a 30 college campus tour in the Northeast featuring extreme sports including: skiing, snowboarding, in-line skating and rock climbing. The Tour will be featured in the quad area of each campus. The exhibit area features sponsor tents including Mountain Dew, Jeep, Fila, Paul Mitchell, Airwalk and of course, PlayStation. Sponsors will showcase their products, conduct promotions, and provide interactive entertainment such as a Trampoline demonstration of aerial maneuvers on skis and snowboards, a trial riding demonstration, an inflatable climbing wall, skiing and snowboarding video games and simulators, in-line skate demos, and Learn to ski and ride tents. Sony's Big MO 9' x 12' outdoor television will display ski and snowboard videos throughout the day.

DATE	CITY/STATE	SCHOOL	RETAIL PARTNER
November 2	Villanova, PA	Villanova University	Circuit City
November 4	Newark, DE	University of Delaware	Circuit City
November 6	Fairfax, VA	George Mason University	Circuit City
November 11	Washington DC	American University	Circuit City

November 12 College Park, MD University of Maryland Circuit City

PLAYSTATION GAMEBREAKER COLLEGIATE CHALLENGE

Tour Routing

You think you've got what it takes? Show off what you've got and score big! Play for a chance to win our grand prize of a trip for two to the Sugar Bowl in New Orleans, a DSS Satellite System, a PlayStation game system, T-shirts, hats, discounts and more.

Two trucks will appear at the following university stadiums:

Promotion Date	University	Game Opponent	Game Location
11/5/96	U. No.Carolina	U. of Louisville	Chapel Hill, NC
11/5/96	U. Wisconsin	U. of Minnesota	Madison, WI
11/12/96	U. Florida	U. of South Carolina	
Gainesville, FL			
11/12/96	Notre Dame	U. of Pittsburgh	South Bend, IN
11/19/96	Florida State	U. Maryland	Miami, FL
11/19/96	Boston College	Miami University	Chestnut Hill, MA
12/3/96	Philadelphia/Army	Philadelphia/ Navy	
Philadelphia, PA			

SPORT MAGAZINE TOUR

BATTLE OF THE COLLEGE STARS

Come and visit this incredible, hands-on promotion which is appearing at a university near you! Over the course of the day, students will compete against each other on our newest hit release, NCAA GameBreaker. There will be many on-site giveaways and the winner from the day's competition will receive a PlayStation game console, a copy of the game, as well as a chance to compete for a trip to California to continue the challenge. The grand prize will be an all expense paid trip to the National College Football Championship game in New Orleans on January, 2 1997.

SCHOOL	DATE
Fresno State	November 6

ONLINE WEEKLY STReport OnLine The wires are a hummin'!

PEOPLE... ARE TALKING

On CompuServe

Joe Mirando
CIS ID: 73637,2262

Hidi ho friends and neighbors. Well, another week has passed us by and there are now fewer than sixty days until Christmas. I can remember back to when our chosen platform had as many offerings as the "big boys" did, and

you could walk into just about any computer store and find software for your ST. For the past several years I've grown nostalgic around the holidays. I think back to the Christmas animations posted on Online Services by users like you and I. They were charming, not to mention tasteful and quite competitive with the best available on any platform.

While those days are gone, I still have some of those animations and delight my nieces and nephews with them when they come over. Do you remember the "morphing cat" watching television and becoming the characters that it was watching as it flipped through the channels? Their other favorite is the "Santa BBS" program which connects them to The Jolly One on his BBS at the North Pole.

Why, you might ask, would I be getting the "holiday warm-fuzzies" now, at Halloween? The reason is simple: Nostalgia. Right now, it's about all we've got and I'm bound and determined to make the most of it. For those of you who've written and asked me about my health and not received a reply in the last few days, thank you. While I'm not back to normal yet, I'm doing much better and am digging out from under the pile of work that I've let accumulate over the past month or so.

While there is still no word on the commercial Web Browser for the ST line of computers, there is a new version of CAB available which I've heard is much more stable than the last one. Funny, but I've been hearing that about each version that's come out for the past six months or so. I'm not berating the authors, simply stating a fact... and lamenting it.

Well, let's get on with the reason we're here, all the news, hints, tips, and info available on CompuServe.

From the Atari Computing Forum

Terry Cano asks:

"O.k. what goes? Is CIS slowly dropping Atari users? I just tried to access the MUSICARTS FORUM and got a messgae...that my current software will not access the FORUM to get and upgrade!!!! If this is the NEW CIS then I'll keep the money I pay them and go to a movie.....BTW, I spend about \$300 a year on CIS... not much but a lot of movies can be bought for that."

Albert Dayes tells Terry:

"Some forums are moving to the new software which requires the HMI host protocol which is only available on the Mac and PC at the current time. CIS does not seem to be too interested in giving out information on it. I believe they are trying to get everyone internet ready browser type client software instead."

Sysop Jim Ness tells Albert (and everyone else):

"The current strategy is to switch all forums over to new NT-based Pentium machines, which required a rewrite of the system software for all services that are moved. They've decided on two sets of access software for most or all of those services. One set is the "HMI" interface used in WinCIM and most other current PC access programs (and a couple of Mac programs). The other set is a Web interface, which will be available to anyone with Web software, once it's finished (still some months away). Forums like this one will remain on the old DEC-compatible minicomputers for the foreseeable future. It would not make a lot of sense to move an Atari support forum to

a PC/Mac environment, at least until we have decent Web access software. There are over 100 forums moved over already, out of maybe 700-800 total. They've taken it very slowly, because of initial teething pains with the new software."

Our old friend Lloyd Pulley tells Jim:

"In my opinion, another stupid move on CIS's part. I own a PC and can't access those 100 Forum's that have switched over. I use NavCIS and it can't handle the new format - and CIS isn't too fast on supplying them (and other 3rd party people) the information needed to support the new format (according to the folks at NavCIS). So what happens? I, and others, use CIS less and less."

Sysop Jim tells Lloyd:

"There is no doubt that the changeover has cost CompuServe some members, mostly due to access problems. On the PC issue, there are a number of access programs which do very well with the new software. I currently use OzWIN, with TAPCIS as a backup. TAPCIS has a DOS interface, so it's kind of "old-fashioned" compared to OzWIN. I'm surprised that the Dvorak people are claiming CIS is slow to provide the new software to them. I happen to know that they have had full access to it for quite awhile. It could be that there is a private beta going on, and only those users have access to the newer version."

Volker Schellberg asks:

"Does anyone know where to get suitable software for an ATARI-ST to connect it with an IBM-PC?"

Albert Dayes asks Volker:

"What kind of software? Are you talking about networking software or just a serial connection between two computers. You should be able to use any telecommunications program to send files back and forth using the serial connection. For networking the only one I know of is called Bio-Net. Not sure of the price but I believe it allows connection to a Novell network maybe even tcp/ip networks."

Volker tells Albert:

"Yes, I just want to connect two computers. There is in fact an Accessory on the ATARI-ST-Language-Disk, the VT52-Emulator. Furthermore there's a short Listing in the manual called 'Mini'-Terminal. Can I work with that ?"

Sysop Bob Retelle tells Volker:

"The VT-52 emulator accessory is a simple "dumb terminal" emulator.. that is, you can send and receive text with it, but it will not do file transfers.. no uploading or downloading of files between the two computers. For full transfer capabilities you'll need a better terminal program for the ST. It's not as bad a "chicken or the egg" situation as you might think though (how do you download a terminal program if you don't already have a terminal program?). You can download Atari programs with your IBM compatible computer and transfer them to the Atari on a 3.5 inch floppy disk.. IF .. you remember to format the floppy ON THE IBM, and format it as a low density 720K disk. Then you can download a program from our software library here and save it to the floppy, transfer it to the Atari

and run it there. Most of our files are compressed with as either LZH or ZIP files, and you can uncompress them on your IBM with either LHA.EXE or any of the PKUNZIP utilities before saving to the floppy if you don't already have the proper Atari versions of those utilities. Then once you have a terminal program running on the Atari, you'll need a standard DOS or Windows terminal program on the IBM, and what's known as a "null modem cable" (available at Radio Shack) to plug them into each other. Let us know if you have any problems getting all this to work..."

P.Walding adds:

"There is a program that allows connecting an ST to a PC via serial connections that then allows you to access the drives on the PC from your ST for file copying, storage, etc. I can't remember the name off-hand. I uploaded it to someone here a few months back and I believe it worked fine. I have removed it from my hard drive to an EZ cart, but will try to find it tonight and upload it here if I can."

Carl Katz tells us that he's...

"...trying to communicate with a library terminal over the phone with my Atari Mega 2. I try to send my configuration to the library's computer as VT52 (the option it offers is VT52 digital) and the screen sizing just doesn't get right, stuff is all in the wrong place. I tried copying the VT52 file from the USA language disk and making it an .ACC file...still to no avail. Does this VT52 .acc file kick in automatically. Am I missing something?"

Albert Dayes tells Carl:

"I would try using a terminal program that supports VT-100 protocol. Most of the commercial telecommunications programs do very well at that. There should be some shareware telecommunications programs that work just as well for VT-100. You are just using the terminal program to connect to the library and not performing file transfers right?"

I jump in and add:

"The VT52 emulator on the language disk has definite negative-pressure properties (it sux <grin>). To be fair, it does emulate a VT52 terminal fairly well, but it's a dumb terminal with no upload/download capabilities. Search the libs for a good shareware term program (STorm, FreezeDried Term, or one of the others that I can't recall at the moment. Most if not all of them provide a range of terminal emulations and upload/download functions. If this is going to be more than a one-shot deal, I'd recommend popping for Flash II. It's my term program of choice now and it does VT-52 quite well. I just had a thought... what are you using right now to log on to CIS? If you're using Flash II or STalker, you've already got what you need. They both do VT-52 very nicely."

Alex Magdaleno posts:

"Last year I got some good information in here on how to move my letters from my ATARI to my IBM. I remember the part about formatting the disk, but I forgot how to convert the files to word for window files after they are in my IBM. Anyone remember how? I'll keep better notes next time."

Our friend Albert Dayes tells Alex:

"Marcel, the shareware program on the Atari ST (in the library), can convert

most of the more popular Atari ST word processing formats to RTF. Most if not all Microsoft Windows based word processors can import RTF. The file conversion needs to occur on the Atari ST. Someone mentioned in the past that Marcel was available for the PC but I have not seen it."

Over in the Atari Gaming forum last week, Kevin Tekel posted this about Nintendo's assertion that the N64 is the first 64 bit video game system:

"HAH! LIAR! Obviously Nintendo of America, Inc. has never heard of the ATARI JAGUAR. A fully 64-bit video game system designed in 1993!!

Jeff Model replies to Kevin:

"No, Jaguar is NOT 64-bit!!!! Read the Brochure they used to give out. THE JAGUAR IS NOT 64-BIT!!!!!! It has a 64-bit wide bus, but so does my mac. Does that mean my mac is 64-bit? NO!! it is only 32-bit, like the Jaguar. atari said the Jag is 64 because it was great marketing (although it was incorrect) and because the bus is 64 bits wide. That means it can move info 64 bits at a time. But the Jag can Think at only 32 bits at a time. It doesn't have a single 64-bit chip in it!! With Atari Marketing/thinking, the n64 is really the n128. The n64 thinks at 64-bits, but it move info 128 bit at a time."

Kevin tells Jeff:

"OK, whatever. IMO it's not the "bits" that counts but the quality of the games. Sometimes I enjoy 4-bit Atari 2600 games better than the latest 1024-bit super-whazoo turbosystems. The new stuff has too much blood & guts (read: realism) for my tastes. I'll take Pac Man over Mortal Kombat any day."

Sysop Bob Retelle jumps in and tells Jeff:

"We've been through all the arguments a hundred times or more... What it boils down to is that in the **computer** world, there are standards and accepted definitions for hardware and performance. Thus a CPU chip with 32 bit registers is a "32bit machine", and one with only 16 bit registers is a "16 bit machine". But in the **video game** world, all bets are off.. it's the marketing department that calls the shots and makes up the "definitions". Thus a video game console with two 8 bit processors can be called a "16 bit game system", and one with a 64 bit bus can be called a "64 bit game system" and no one can say any differently. It's the company making the product which defines what it's called. (It's like the 128K game cartridges which are advertized as being a "Meg"... a Mega BIT game cartridge. That kind of thing would never fly in the computer world, but in video gaming, as I said, all bets are off.) In my opinion, the only true measure of a game system is what you see on the screen... what the manufacturer **claims** doesn't matter."

Well folks, on that auspicious note, we'll pause 'till next week. Tune in again, same time, same station, and be ready to listen to what they are saying when...

PEOPLE ARE TALKING

EDITORIAL QUICKIES

Tuesday is Election Day.. Please VOTE!

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